

TITLE 327 WATER POLLUTION CONTROL BOARD

DRAFT RULE
#99-58(WPCB)

DIGEST

Adds a new rule concerning wetland water quality standards and a new article to establish procedures and criteria for reviewing federally permitted or licensed activities that require a water quality certification under Section 401 of the federal Clean Water Act. These activities include those regulated by the U.S. Corps of Engineers under Section 404 of the Clean Water Act and by the Federal Energy Regulatory Commission, such as licenses for hydroelectric facilities. Effective 30 days after filing with the secretary of state.

HISTORY

First Notice of Comment Period: #94-5(WPCB) Indiana Register, September 1, 1994, (17 IR 3013), #97-3 (WPCB) Indiana Register, April 1, 1997, (20 IR 1960), and #99-58(WPCB), Indiana Register, April 1, 1999, (22 IR 2349).

Second Notice of Comment Period and Notice of First Hearing: December 1, 1999, Indiana Register (23 IR 643).

Rescheduled Notice of First Hearing: March 1, 2000, Indiana Register (23 IR 1418).

Rescheduled Notice of First Hearing: May 1, 2000, Indiana Register (23 IR 2017).

Date of First Hearing: June 14, 2000.

327 IAC 2-1.8

327 IAC 17

SECTION 1. 327 IAC 2-1.8 IS ADDED TO READ AS FOLLOWS:

Rule 1.8. Wetland Water Quality Standards

Standards

327 IAC 2-1.8-1 Applicability

Authority: IC 13-14-8-1; IC 13-14-8-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 1. The wetland water quality standards established in this rule apply to wetlands located within the state.*(Water Pollution Control Board; 327 IAC 2-1.8-1)*

327 IAC 2-1.8-2 Definitions

Authority: IC 13-14-8-1; IC 13-14-8-2

Affected: IC 4-22-34; IC 13-11-2-265; IC 13-30; IC 14-22-34

Sec. 2. The following definitions apply throughout this rule:

- (1) “Acid bog” means a wetland that typically includes the following characteristics:
- (A) Located within glacial, moraine, ice-block depressions, or kettles, but rarely located in unglaciated areas.
 - (B) The water regime is nonflowing or very slowly flowing.
 - (C) Substrates are seasonally or permanently saturated.
 - (D) Water chemistry is acidic.
 - (E) Nutrient availability is low.
 - (F) Composed of sphagnum peat or other low nutrient organic substrates.
 - (G) Indicator plant species may include the following:
 - (i) Arrow grass (*Scheuchzeria palustris americana*).
 - (ii) Bog bladderwort (*Utricularia geminiscapa*).
 - (iii) Bog rosemary (*Andromeda glaucophylla*).
 - (iv) Bog spike rush (*Eleocharis robbinsii*).
 - (v) Cordroot sedge (*Carex chordorrhiza*).
 - (vi) Dense cotton grass (*Eriophorum spissum*).
 - (vii) Dragon’s mouth (*Arethusa bulbosa*).
 - (viii) Dwarf birch (*Betula pumila*).
 - (ix) Grass pink (*Calopogon tuberosus*).
 - (x) Gray bog sedge (*Carex canescens*).
 - (xi) Hair star sedge (*Carex atlantica capillacea*).
 - (xii) Hardhack (*Spiraea tomentosa rosea*).
 - (xiii) Highbush blueberry (*Vaccinium corymbosum*).
 - (xiv) Large cranberry (*Vaccinium macrocarpon*).
 - (xv) Large-fruited star sedge (*Carex echinata*).
 - (xvi) Leatherleaf (*Chamaedaphne calyculata angustifolia*).
 - (xvii) Marsh St. John’s wort (*Hypericum virginicum*).
 - (xviii) Moccasin flower (*Cypripedium acaule*).
 - (xix) Mountain holly (*Nemopanthus mucronata*).
 - (xx) Muck sedge (*Carex limosa*).
 - (xxi) Narrow-leaved sundew (*Drosera intermedia*).
 - (xxii) Orange fringed orchid (*Habenaria ciliaris*).
 - (xxiii) Pitcher plant (*Sarracenia purpurea*).
 - (xxiv) Poison sumac (*Rhus vernix*).
 - (xxv) Round-leaved sundew (*Drosera rotundifolia*).
 - (xxvi) Running bog sedge (*Carex oligosperma*).
 - (xxvii) Rusty cotton grass (*Eriophorum virginicum*).
 - (xxviii) Screwstem (*Bartonia virginica*).
 - (xxix) Silky willow (*Salix sericea*).
 - (xxx) Slender cotton grass (*Eriophorum gracile*).
 - (xxxi) Small cranberry (*Vaccinium oxycoccus*).
 - (xxxii) Smith’s tufted bulrush (*Scirpus smithii*).
 - (xxxiii) Smooth white violet (*Viola pallens*).
 - (xxxiv) Snake-mouth orchid (*Pogonia ophioglossoides*).
 - (xxxv) Tamarack (*Larix laricina*).
 - (xxxvi) Three-seeded bog sedge (*Carex trisperma*).

- (xxxvii) Two-seeded sedge (*Carex disperma*).
- (xxxviii) Virginia chain fern (*Woodwardia virginica*).
- (xxxix) White beak rush (*Rhynchospora alba*).
- (xl) Yellow avens (*Geum aleppicum*).

(2) “Calcareous sand” means a soil that is less than ten percent (10%) clay and more than eighty-five percent (85%) sand and effervesces with cold ten percent (10%) hydrochloric acid.

(3) “Circumneutral bog” means a wetland that typically includes the following characteristics:

- (A) Located within glacial, moraine, ice-block depressions, or kettles, but rarely located in unglaciated areas.
- (B) Mineral-laden ground water inflow fluctuates with hydrostatic pressure.
- (C) Water is nonflowing or very slowly flowing.
- (D) Substrates are saturated and may rise or fall with seasonal water level fluctuations.
- (E) Water chemistry is circumneutral to slightly acidic.
- (F) Deep rooted vegetation may be exposed to the alkaline or circumneutral minerotrophic ground water while shallow roots inhabit more acidic layers of the peat substrate.
- (G) Nutrient availability is low.
- (H) Composed of sphagnum peat or other low nutrient organic substrates.
- (I) Indicator plant species may include the following:
 - (i) Bog panicked sedge (*Carex diandra*).
 - (ii) Bog willow (*Salix pedicellaris hypoglauca*).
 - (iii) Buckbean (*Menyanthes trifoliata minor*).
 - (iv) Flat-leaved bladderwort (*Utricularia intermedia*).
 - (v) Greenbog sedge (*Carex brunnescens*).
 - (vi) Highbush blueberry (*Vaccinium corymbosum*).
 - (vii) Marsh cinquefoil (*Potentilla palustris*).
 - (viii) Narrow-leaved wooly sedge (*Carex lasiocarpa americana*).
 - (ix) Northern gooseberry (*Ribes hirtellum*).
 - (x) Northern panic grass (*Panicum boreale*).
 - (xi) Pitcher plant (*Sarracenia purpurea*).
 - (xii) Poison sumac (*Rhus vernix*).
 - (xiii) Slender sedge (*Carex leptalea*).
 - (xiv) Small bladderwort (*Utricularia minor*).
 - (xv) Tamarack (*Larix laricina*).
 - (xvi) White beak rush (*Rhynchospora alba*).

(4) “Commissioner” means the commissioner of the department of environmental management.

(5) “Compensatory mitigation” means the restoration, creation, or rehabilitation of a wetland or other waters of the state to compensate for losses of designated and existing uses.

(6) “Cypress swamp” means a forested wetland that typically includes the following characteristics:

(A) Located within a depression or slough associated with one (1) or more of the following:

- (i) Wabash River.
- (ii) Ohio River.
- (iii) The major tributaries of item (i) or (ii).

(B) Seasonally to permanently saturated or ponded.

(C) Water chemistry is indistinct.

(D) Nutrient availability is indistinct.

(E) Composed of very poorly drained soils, usually not peat.

(F) Indicator plant species include Bald cypress (*Taxodium distichum*) and may include the following:

- (i) American storax (*Styrax americana*).
- (ii) Bloodleaf (*Iresine rhizomatosa*).
- (iii) Catbird grape (*Vitis palmata*).
- (iv) Climbing hempweed (*Mikania scandens*).
- (v) Featherfoil (*Hottonia inflata*).
- (vi) Overcup oak (*Quercus lyrata*).
- (vii) Swamp cottonwood (*Populus heterophylla*).
- (viii) Water locust (*Gleditsia aquatica*).
- (ix) White milkweed (*Asclepias perennis*).

(7) “Designated uses” are those uses specified in this rule for each wetland whether or not they are being attained.

(8) “Dune and swale” means a complex of sand dunes and wetlands that typically includes the following characteristics:

(A) Sand hills ,divided by low lying areas referred to as swales, that:

- (i) are located adjacent to or near Lake Michigan; and
- (ii) may contain one (1) or more of the following:

- (AA) Wet prairies.
- (BB) Pannes.
- (CC) Coastal remnant communities.

(B) Hydrology is ground water driven.

(C) Water chemistry is alkaline and carbonate rich.

(D) Nutrient availability is indistinct.

(E) Substrate is wet calcareous sand.

(F) Indicator plant species may include the following:

- (i) Beach pea (*Lathyrus japonicus glaber*).
- (ii) Common bog arrow grass (*Triglochin maritima*).
- (iii) Dune goldenrod (*Solidago racemosa gillmanii*).
- (iv) Dune thistle (*Cirsium pitcheri*).
- (v) Dune willow (*Salix syrticola*).
- (vi) Early fen sedge (*Carex crawei*).
- (vii) False golden sedge (*Carex garberi*).
- (viii) False heather (*Hudsonia tomentosa*).
- (ix) Fringed gentian (*Gentiana crinita*).
- (x) Golden sedge (*Carex aurea*).

- (xi) Green yellow sedge (*Carex viridula*).
- (xii) Hair bladderwort (*Utricularia subulata*).
- (xiii) Horned bladderwort (*Utricularia cornuta*).
- (xiv) Humped bladderwort (*Utricularia gibba*).
- (xv) Indian paintbrush (*Castilleja coccinea*).
- (xvi) Jack pine (*Pinus banksiana*).
- (xvii) Jointweed (*Polygonella articulata*).
- (xviii) Kalm's St. John's wort (*Hypericum kalmianum*).
- (xix) Large yellow sedge (*Carex flava*).
- (xx) Northern panic grass (*Panicum boreale*).
- (xxi) Pale false foxglove (*Agalinis skinneriana*).
- (xxii) Prairie gray sedge (*Carex conoidea*).
- (xxiii) Rose gentian (*Sabatia angularis*).
- (xxiv) Sand club moss (*Selaginella rupestris*).
- (xxv) Sea rocket (*Cakile edentula*).
- (xxvi) Seaside spurge (*Euphorbia polygonifolia*).
- (xxvii) Small yellow lady's slipper (*Cypripedium calceolus parviflorum*).
- (xxviii) Tall nut rush (*Scleria triglomerata*).
- (xxix) Twig rush (*Cladium mariscoides*).
- (xxx) Wrinkle-sheathed spike (*Eleocharis olivacea*).

(9) "Duration", in regard to inundation or soil saturation, means the length of time, during a growing season, when:

- (A) water stands at or above the soil surface; or
- (B) the soil is saturated.

(10) "Endangered species" means one (1) of the following:

- (A) Endangered species as defined in 16 USC § 1532(6) and listed pursuant to 16 USC § 1533.*
- (B) Endangered species as defined in IC 14-22-34-1 and listed by the department of natural resources in 312 IAC 9.

(11) "Existing uses" means those uses actually attained in the wetland on or after November 28, 1975, whether or not they are included under section 3 of this rule.

(12) "Fen" means a wetland that typically includes the following characteristics:

- (A) Formed from the discharge of water that travels through carbonate rich formations.
- (B) Located:
 - (i) in general, near glacial formations such as:
 - (AA) kames;
 - (BB) eskers; or
 - (CC) moraines; or
 - (ii) also near river bluffs or dunes and in flats associated with the glacial formations listed in item (i).
- (C) Hydrology is minerotrophic ground water.
- (D) The water regime is very slowly flowing water that fluctuates seasonally.
- (E) Water chemistry is alkaline and rich in carbonates.

- (F) Nutrient availability is low but with high mineral content.
- (G) Substrate is marl, peat, or muck.
- (H) Indicator plant species may include the following:
- (i) Alder buckthorn (*Rhamnus alnifolia*).
 - (ii) Black ash (*Fraxinus nigra*).
 - (iii) Bog goldenrod (*Solidago uliginosa*).
 - (iv) Bog lobelia (*Lobelia kalmii*).
 - (v) Bog valerian (*Valeriana uliginosa*).
 - (vi) Common valerian (*Valeriana ciliata*).
 - (vii) Dwarf birch (*Betula pumila*).
 - (viii) Eastern white cedar (*Thuja occidentalis*).
 - (ix) False asphodel (*Tofieldia glutinosa*).
 - (x) Fen panicled sedge (*Carex prairea*).
 - (xi) Fen star sedge (*Carex sterilis*).
 - (xii) Grass of parnassus (*Parnassia glauca*).
 - (xiii) Hair beak rush (*Rhynchospora capillacea*).
 - (xiv) Hemlock parsley (*Conioselinum chinense*).
 - (xv) Lance-leaved buckthorn (*Rhamnus lanceolata*).
 - (xvi) Large yellow sedge (*Carex flava*).
 - (xvii) Low calamint (*Satureja arkansana*).
 - (xviii) Low nut rush (*Scleria verticillata*).
 - (xix) Marsh bellflower (*Campanula uliginosa*).
 - (xx) Marsh club moss (*Selaginella apoda*).
 - (xxi) Marsh wild timothy (*Muhlenbergia glomerata*).
 - (xxii) Mead's stiff sedge (*Carex meadii*).
 - (xxiii) Narrow-leaved cotton grass (*Eriophorum angustifolium*).
 - (xxiv) Narrow-leaved loosestrife (*Lysimachia quadriflora*).
 - (xxv) Northern bog orchid (*Habenaria hyperborea huronensis*).
 - (xxvi) Northern gooseberry (*Ribes hirtellum*).
 - (xxvii) Ohio goldenrod (*Solidago ohioensis*).
 - (xxviii) Prairie star sedge (*Carex interior*).
 - (xxix) Rough bedstraw (*Galium asprellum*).
 - (xxx) Rush aster (*Aster borealis*).
 - (xxxi) Sage willow (*Salix candida*).
 - (xxxii) Shrubby cinquefoil (*Potentilla fruticosa*).
 - (xxxiii) Slender bog arrow grass (*Triglochin palustris*).
 - (xxxiv) Small bladderwort (*Utricularia minor*).
 - (xxxv) Small fringed gentian (*Gentiana procera*).
 - (xxxvi) Snake-mouth orchid (*Pogonia ophioglossoides*).
 - (xxxvii) Swamp goldenrod (*Solidago patula*).
 - (xxxviii) Swamp thistle (*Cirsium muticum*).
 - (xxxix) Sweet william phlox (*Phlox maculata*).
 - (xl) Twig rush (*Cladium mariscoides*).
 - (xli) White beak rush (*Rhynchospora alba*).
 - (xlii) White lady's slipper (*Cypripedium candidum*).

- (xl) Wicket spike rush (*Eleocharis rostellata*).
- (13) “Frequency”, in regard to inundation or soil saturation, means the periodicity of coverage of an area by surface water or soil saturation.
- (14) “Growing season” means the portion of the year when soil temperature, measured twenty (20) inches below the surface, is above biological zero (0) (five (5) degrees Celsius or forty-one (41) degrees Fahrenheit).
- (15) “Habitat” means the environment occupied by individuals of a particular species, population, or community.
- (16) “Inundated” means a condition of temporary or permanent water coverage of a land surface.
- (17) “Marl” means a deposit of crumbling, earthy material composed of clays, carbonates of calcium and magnesium, and remnants of shells.
- (18) “Marl beach” means a fen-like wetland that typically includes the following characteristics:
- (A) Located along a lake shoreline mostly in the northeastern portion of Indiana.
 - (B) Shallowly inundated with water in the spring but dry during the summer.
 - (C) Water chemistry is alkaline.
 - (D) Nutrient availability is indistinct.
 - (E) Substrate is marl.
 - (F) Indicator plant species may include the following:
 - (i) Fen star sedge (*Carex sterilis*).
 - (ii) Flat-leaved bladderwort (*Utricularia intermedia*).
 - (iii) Golden-seeded spike rush (*Eleocharis elliptica*).
 - (iv) Hair beak-rush (*Rhynchospora capillacea*).
 - (v) Short-headed rush (*Juncus brachycephalus*).
 - (vi) Slender bog arrow grass (*Triglochin palustris*).
 - (vii) Twig rush (*Cladium mariscoides*).
 - (viii) Wicket spike rush (*Eleocharis rostellata*).
 - (ix) Wiry panic grass (*Panicum flexile*).
- (19) “Muck flat” means a shoreline or lakeshore wetland that typically includes the following characteristics:
- (A) Located in the northern portion of the state at the margins of lakes or covering shallow basins.
 - (B) Has a basin water level that fluctuates during a season or from year to year in response to the amount of precipitation.
 - (C) May float on the water surface but is usually inundated during high water periods and exposed periodically.
 - (D) Water chemistry is indistinct.
 - (E) Nutrient availability is indistinct.
 - (F) Substrate is peat.
 - (G) Indicator plant species may include the following:
 - (i) Autumn sedge (*Fimbristylis autumnalis*).
 - (ii) Black-fruited spike (*Eleocharis melanocarpa*).

- (iii) Bog spike rush (*Eleocharis robbinsii*).
- (iv) Brown-fruited rush (*Juncus pelocarpus*).
- (v) Carey's heartsease (*Polygonum careyi*).
- (vi) Chestnut sedge (*Fimbristylis puberula*).
- (vii) Cross milkwort (*Polygala cruciata aquilonia*).
- (viii) Floating bladderwort (*Utricularia inflata minor*).
- (ix) Grass beak rush (*Rhynchospora globularis recognita*).
- (x) Horned beak rush (*Rhynchospora macrostachya*).
- (xi) Hyssop hedge nettle (*Stachys hyssopifolia*).
- (xii) Long-beaked bald rush (*Psilocarya scirpoides*).
- (xiii) Meadow beauty (*Rhexia virginica*).
- (xiv) Netted nut rush (*Scleria reticularis*).
- (xv) Pipewort (*Eriocaulon septangulare*).
- (xvi) Pursh's tufted bulrush (*Scirpus purshianus*).
- (xvii) Round-headed rush (*Juncus scirpoides*).
- (xviii) Sand panic grass (*Panicum spretum*).
- (xix) Sessile water horehound (*Lycopus amplexans*).
- (xx) Slender-leaved goldenrod (*Solidago tenuifolia*).
- (xxi) Smith's tufted bulrush (*Scirpus smithii*).
- (xxii) Southern yellow flax (*Linum intercursum*).
- (xxiii) Stiff yellow flax (*Linum striatum*).
- (xxiv) Tall yellow-eyed grass (*Xyris difformis*).
- (xxv) Umbrella sedge (*Fuirena pumila*).
- (xxvi) Warty panic grass (*Panicum verrucosum*).
- (xxvii) Water pennywort (*Hydrocotyle umbellata*).
- (xxviii) Wrinkle-sheathed spike (*Eleocharis olivacea*).
- (xxix) Yellow-eyed grass (*Xyris torta*).

(20) "Practicable" means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

(21) "Threatened species" means one (1) of the following:

(A) Threatened species as defined in 16 U.S.C 1532(20) and listed pursuant to 16 U.S.C 1533.

(B) Threatened species as defined in 312 IAC 9-1-14 and listed by the department of natural resources in 312 IAC 9.

(22) "Rehabilitation" means the remediation of factors causing degradation of existing and designated uses of a wetland.

(23) "Restoration" means the manipulation of a site for the purpose of returning the site, which was previously a wetland, back into a wetland.

(24) "Sand flat" means a shoreline or lakeshore wetland located in the northern portion of Indiana that has the same characteristics as a muck flat with the exception that the substrate is composed of sand.

(25) "Saturated" means a situation where all easily drained voids between soil particles in the root zone are temporarily or permanently filled with water up to the soil surface at a pressure greater than atmospheric pressure.

(26) “Sinkhole pond” means a wetland that typically includes the following characteristics:

- (A) Located within depressions formed by chemical and physical weathering of the underlying limestone.**
- (B) Found in the karst region of southern Indiana.**
- (C) Permanently inundated or saturated with water and dry only in drought years.**
- (D) Water chemistry is alkaline to circumneutral.**
- (E) Nutrient availability is indistinct.**
- (F) Substrate is indistinct.**
- (G) Indicator plant species may include the following:**
 - (i) Branched bur reed (*Sparganium angrocladum*).**
 - (ii) Bristly sedge (*Carex comosa*).**
 - (iii) Broad-leafed paniced sedge (*Carex decomposita*).**
 - (iv) Humped bladderwort (*Utricularia gibba*).**
 - (v) Sharp scaled manna grass (*Glyceria acutiflora*).**
 - (vi) Swamp loosestrife (*Decodon verticillatus*).**
 - (vii) Three-way sedge (*Dulichlum arundinaceum*).**
 - (viii) Water-hissop (*Bacopa rotundifolia*).**

(27) “Sinkhole swamp” means a wetland that typically has the following characteristics:

- (A) Located within depressions formed by chemical and physical weathering of the underlying limestone.**
- (B) Found in the karst region of southern Indiana.**
- (C) Permanently inundated or saturated with water and dry only in drought years.**
- (D) Water chemistry is alkaline to circumneutral.**
- (E) Nutrient availability is indistinct.**
- (F) Substrate is indistinct.**
- (G) Indicator plant species may include the following:**
 - (i) Broad-leafed paniced sedge (*Carex decomposita*).**
 - (ii) Greater hop sedge (*Carex gigantea*).**
 - (iii) Horned beak rush (*Rhynchospora corniculata*).**
 - (iv) Marsh elder (*Itea virginica*).**
 - (v) Netted chain fern (*Woodwardia areolata*).**
 - (vi) Small spearwort (*Ranunculus pusillus*).**
 - (vii) Swamp cottonwood (*Populus heterophylla*).**
 - (viii) Walter's St. John's wort (*Triadenum walteri*).**

(28) “Threatened species” means one (1) or more of the following:

- (A) Threatened species as defined in 16 USC § 1532(20) and listed pursuant to 16 USC § 1533.**
- (B) Threatened species as defined in 312 IAC 9-1-14 and listed by the Indiana Department of Natural Resources in 312 IAC 9.**

(29) “Waters” or “waters of the state” has the meaning set forth in IC 13-11-2-265.

(30) “Wetland” means an area that is inundated or saturated by surface or ground

water at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. For the purpose of this rule, wetlands will be determined and delineated using the U.S. Army Corps of Engineers Wetland Delineation Manual, Technical Report Y-87-1, January 1987**.

(31) “Wetland-dependent species” means a plant, mammal, bird, amphibian, or reptile that is a threatened or endangered species and requires wetlands for any or all of its life cycle. These species are listed in the table set forth in 327 IAC 2-1.8-4.

***The federal endangered and threatened species listed by the United States Fish and Wildlife Service pursuant to 16 U.S.C. § 1533 is incorporated by reference. Copies of this list may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402 or from the Indiana Department of Environmental Management, Office of Water Management, Indiana Government Center-North, 100 North Senate Avenue, Room 1255, Indianapolis, Indiana 46206. (Water Pollution Control Board; 327 IAC 2-1.8-2)**

****The Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1 is incorporated by reference. Copies of this manual may be obtained from the U.S. Army Engineer Waterways Experiment Station, 3909 Halls Ferry Road, Vicksburg, Mississippi 39180 or from the Indiana Department of Environmental Management, Office of Water Management, Indiana Government Center-North, 100 North Senate Avenue, Room 1255, Indianapolis, Indiana 46206. (Water Pollution Control Board; 327 IAC 2-1.8-2)**

327 IAC 2-1.8-3 Wetland designated uses

Authority: IC 13-14-8-1; IC 13-14-8-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 3. All wetlands are designated to include the following uses:

(1) Habitat for a well-balanced biotic community that is composed of the flora and fauna typical of the wetland type, including the following:

(A) Habitat for aquatic organisms, including the following:

(i) Fish.

(ii) Crustaceans.

(iii) Mollusks.

(iv) Insects.

(v) Annelids.

(vi) Planktonic organisms.

(B) Habitat for wetland flora.

(C) Habitat for resident and transient wildlife species, including water dependent mammals, birds, reptiles, and amphibians.

(2) Surface and ground water movement that may include the maintenance of low water stream flow, ground water discharge, ground water recharge, and peak flow suppression.

(3) Recreational and natural aesthetic uses.
(Water Pollution Control Board; 327 IAC 2-1.8-3)

327 IAC 2-1.8-4 Classification of wetlands
Authority: IC 13-14-8-1; IC 13-14-8-2
Affected: IC 13-18-3; IC 13-18-4

Sec. 4. A wetland, other than a wetland that has been designated as an outstanding state resource water or an outstanding national resource water pursuant to section 7 of this rule, shall be classified as a Tier I or a Tier II wetland based upon the wetland's sensitivity to disturbance, rarity, and potential to be adequately replaced by compensatory mitigation. A wetland shall be classified as follows:

- (1) Tier I unless the wetland is classified as a Tier II wetland under subdivision (2).
- (2) Tier II if it meets one (1) of the following qualifications:
 - (A) The department of natural resources has documented the presence of a wetland-dependent species in the wetland. Wetland-dependent species are listed in Table 4(a). If the department of natural resources determines that the wetland does not contain suitable habitat to support the wetland-dependent species, then the wetland is not a Tier II wetland.

Table 4(a) Wetland-dependent threatened and endangered species	
SCIENTIFIC NAME	COMMON NAME
MAMMALS	
<i>Lutra canadensis</i>	river otter
<i>Sylvilagus aquaticus</i>	swamp rabbit
BIRDS	
<i>Botaurus lentiginosus</i>	American bittern
<i>Chlidonias niger</i>	black tern
<i>Cisothorus plantensis</i>	marsh wren
<i>Grus canadensis</i>	sandhill crane
<i>Ixobrychus exilis</i>	least bittern
<i>Laterallus jamaicensis</i>	black rail
<i>Nyctanassa mycticorax</i>	black-crowned night heron
<i>Nyctanassa violacea</i>	yellow-crowned night heron

<i>Pandion haliaetus</i>	osprey
<i>Rallus elegans</i>	king rail
<i>Rallus limicola</i>	Virginia rail
REPTILES	
<i>Agkistrodon piscivorus</i>	western cottonmouth
<i>Chrysemys concinna</i>	hieroglyphic river cooter
<i>Clemmys guttata</i>	spotted turtle
<i>Clonophis kirtlandi</i>	Kirtland's snake
<i>Emydoidea blandingi</i>	Blandings turtle
<i>Kinosternon subrubrum</i>	eastern mud turtle
<i>Mycroclemys temmincki</i>	alligator snapping turtle
<i>Nerodia erythrogaster</i>	copperbelly water snake
<i>Sistrurus catenatus</i>	eastern massasauga
<i>Thamnophis butleri</i>	Butler's garter snake
AMPHIBIANS	
<i>Hemidactylium scutatum</i>	four-toed salamander
<i>Pseudotriton ruber</i>	northern red salamander
<i>Rana areolata</i>	northern crawfish frog
PLANTS	
<i>Azolla caroliniana</i>	Carolina mosquitofern
<i>Bacopa rotundifolia</i>	disk waterhyssop
<i>Calla palustris</i>	water arum
<i>Carex atherodes</i>	wheat sedge
<i>Carex atlantica capillacea</i>	prickly bog sedge
<i>Carex bebbii</i>	Bebb's sedge
<i>Carex chordorrhiza</i>	creeping sedge
<i>Carex decomposita</i>	cypressknee sedge
<i>Carex disperma</i>	softleaf sedge

<i>Carex echinata</i>	star sedge
<i>Carex flava</i>	yellow sedge
<i>Carex gigantea</i>	giant sedge
<i>Carex limosa</i>	mud sedge
<i>Carex pseudocyperus</i>	cypresslike sedge
<i>Carex retrorsa</i>	knotsheath sedge
<i>Carex scabrata</i>	eastern rough sedge
<i>Carex straminea</i>	eastern straw sedge
<i>Chrysosplenium americanum</i>	American golden saxifrage
<i>Cyperus acuminatus</i>	tapertip flatsedge
<i>Dryopteris celsa</i>	log fern
<i>Echinodorus cordifolius</i>	creeping burrhead
<i>Echinodorus tenellus</i>	mudbabies
<i>Eleocharis equisetoides</i>	jointed spikesedge
<i>Eleocharis microcarpa</i>	smallfruit spikerush
<i>Eriophorum gracile</i>	slender cottongrass
<i>Fimbristylis puberula</i>	hairy fimbry
<i>Fuirena pumila</i>	dwarf umbrella-sedge
<i>Geum rivale</i>	purple avens
<i>Gleditsia aquatica</i>	water locust
<i>Glyceria acutiflora</i>	creeping mannagrass
<i>Glyceria borealis</i>	small floating mannagrass
<i>Hibiscus moscheutos lasiocarpus</i>	hairy fruited hibiscus
<i>Hottonia inflata</i>	American featherfoil
<i>Hydrocotyle americana</i>	American marshpennywort
<i>Hypericum adpressum</i>	creeping St. Johnswort
<i>Hypericum gymnanthum</i>	clasping leaf St. Johnswort
<i>Isoetes engelmannii</i>	Appalachian quillwort
<i>Isoetes melanopoda</i>	blackfoot quillwort
<i>Itea virginica</i>	Virginia sweetspire
<i>Juncus acuminatus</i>	tapertip rush

<i>Juncus militaris</i>	bayonet rush
<i>Juncus nodatus</i>	stout rush
<i>Lemna minor</i>	common duckweed
<i>Leptochloa panicoides</i>	Amazon sprangletop
<i>Ludwigia glandulosa</i>	cylindricfruit primrose-willow
<i>Ludwigia sphaerocarpa</i>	globefruit primrose-willow
<i>Lycopus amplexans</i>	clasping water horehound
<i>Mikania scandens</i>	climbing hempvine
<i>Myosotis laxa</i>	bay forget-me-not
<i>Myriophyllum pinnatum</i>	cutleaf watermilfoil
<i>Myriophyllum verticillatum</i>	whorl-leaf watermilfoil
<i>Najas gracillima</i>	slender waternymph
<i>Neobeckia aquatica</i>	lakecress
<i>Plantago cordata</i>	heartleaf plantain
<i>Polygonum hydropiperoides</i> var <i>opelousanum</i>	northeastern smartweed
<i>Polygonum hydropiperoides</i> var <i>setaceum</i>	swamp smartweed
<i>Potamogeton epihydrus</i>	ribbonleaf pondweed
<i>Potamogeton friesii</i>	Fries' pondweed
<i>Potamogeton oakesianus</i>	Oakes' pondweed
<i>Potamogeton praelongus</i>	whitestem pondweed
<i>Potamogeton pulcher</i>	spotted pondweed
<i>Potamogeton richardsonii</i>	Richardson's pondweed
<i>Potamogeton robbinsii</i>	Robbins' pondweed
<i>Potamogeton strictifolius</i>	narrowleaf pondweed
<i>Potamogeton vaseyi</i>	Vasey's pondweed
<i>Ranunculus laxicaulis</i>	Mississippi buttercup
<i>Ranunculus pusillus</i>	low spearwort
<i>Rhexia mariana</i> var <i>mariana</i>	Maryland meadow beauty
<i>Rhynchospora corniculata</i> var <i>interior</i>	shortbristle horned beaksedge
<i>Rhynchospora scirpoides</i>	longbeak beaksedge
<i>Rudbeckia fulgida</i> var <i>umbrosa</i>	coneflower

<i>Salix serissima</i>	autumn willow
<i>Scheuchzeria palustris americana</i>	American scheuchzeria
<i>Schoenoplectus hallii</i>	Hall's bulrush
<i>Schoenoplectus purshianus</i>	weakstalk bulrush
<i>Schoenoplectus smithii</i>	Smith's bulrush
<i>Schoenoplectus torreyi</i>	Torrey's bulrush
<i>Scirpus expansus</i>	woodland bulrush
<i>Scleria reticularis</i>	netted nutrush
<i>Sparganium androcladum</i>	branched bur-reed
<i>Taxodium distichum</i>	bald cypress
<i>Triglochin palustre</i>	marsh arrowgrass
<i>Utricularia cornuta</i>	horned bladderwort
<i>Utricularia minor</i>	lesser bladderwort
<i>Utricularia radiata</i>	little floating bladderwort
<i>Vaccinium oxycoccos</i>	small cranberry
<i>Xyris difformis</i>	bog yelloweyed grass
<i>Zannichellia palustris</i>	horned pondweed

(B) The wetland is located within a one-half (0.5) mile radius of a site where the department of natural resources has documented the presence of a wetland-dependent species unless:

- (i) the wetland does not contain suitable habitat to support the threatened or endangered species as determined by the Indiana department of natural resources; or
- (ii) impacts to the wetland will not adversely affect the threatened or endangered species.

(C) The wetland is one (1) of the following types:

- (i) Acid bog.
- (ii) Circumneutral bog.
- (iii) Cypress swamp.
- (iv) Fen.
- (v) Dune and swale.
- (vi) Muck flat.
- (vii) Sinkhole pond.
- (viii) Sinkhole swamp.
- (ix) Sand flat.
- (x) Marl beach.

(Water Pollution Control Board; 327 IAC 2-1.8-4)

327 IAC 2-1.8-5 Wetland antidegradation implementation standard and procedures

Authority: IC 13-14-8-1; IC 13-14-8-2

Affected: IC 13-18-3; IC 13-18-4; IC 13-18-7; IC 13-23-13; IC 13-24-1; IC 13-25-5

Sec. 5. (a) Designated and existing uses for Tier I and Tier II wetlands must be maintained and protected so that impacts to a wetland does not result in a net loss of wetland acreage or uses, except as allowed by this section.

(b) The following antidegradation requirements apply to wetlands:

(1) For a Tier I wetland, designated and existing uses must be maintained and protected, and no degradation shall be allowed, unless the following are demonstrated to the commissioner's satisfaction prior to any impact occurring to the Tier I wetland:

(A) There is no practicable alternative that would have less adverse impact on the wetland ecosystem.

(B) The impact will not result in significant degradation to the aquatic ecosystem, as determined using the criteria set forth in 40 CFR § 230.10(c)*.

(C) Potential adverse impacts to the wetland will be minimized.

(D) Compensatory mitigation will replace the impacted wetland and its uses with a wetland of the same type that supports uses equal to or higher than existing uses of the impacted wetland unless it is determined to be unnecessary by the commissioner because no significant impacts to water quality will occur. Wetland impacts greater than one-tenth (0.1) acre shall be considered significant. For all other impacts, the commissioner shall consider the following factors to determine whether a project will have a significant impact on water quality:

(i) Whether the purpose of the project is to maintain, repair, or rehabilitate existing, manmade structures, excluding drainage ditches.

(ii) The secondary and cumulative impacts of the project.

(iii) The proximity and hydrologic connection of the wetland proposed to be impacted to other water bodies.

(iv) The duration of the activity associated with the project.

(v) The plant species diversity and fish and wildlife habitat components of the water to be impacted.

(vi) Whether the project is being undertaken to control, abate, or correct an environmental problem or threat to the environment, including a response action pursuant to one (1) of the following:

(AA) The Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. 9601).**

(BB) A corrective action pursuant to the Resource Conservation Recovery Act (42 U.S.C. 6901)*.**

(CC) An Underground Storage Tank corrective action under IC 13-23-13.

(DD) A remediation of petroleum releases under IC 13-24-1.

(EE) A voluntary remediation under IC 13-25-5.

(FF) An abatement or correction of any polluted condition under IC 13-18-7.

The commissioner may require that the compensatory mitigation performed under clause (D) be completed and approved prior to any impact to the wetland.

(2) For a Tier II wetland, the following requirements apply:

(A) Designated and existing uses shall be maintained and protected and no degradation shall be allowed, unless the following are demonstrated to the Commissioner's satisfaction prior to any impact occurring to the Tier II wetland:

(i) There is no practicable alternative that would have less adverse impact on the wetland ecosystem. Practicable alternatives are presumed to be available for a Tier II wetland unless it is clearly demonstrated otherwise.

(ii) Potential adverse impacts to the wetland will be minimized.

(iii) The impact will not result in significant degradation to the aquatic ecosystem, as determined using the criteria set forth in 40 CFR § 230.10(c)*.

(iv) Compensatory mitigation shall be required for all significant impacts to Tier II wetlands and shall be:

(AA) performed to replace the existing Tier II wetland and its uses with a wetland of the same type that supports uses equal to or higher than existing uses of the impacted wetland; and

(BB) completed by the applicant and determined to be successful by the department prior to the department's authorization of any impact to the wetland.

(B) The applicant shall demonstrate, using the procedures set forth in 327 IAC 17-3-5, that the proposed degradation is necessary to accommodate important social and economic development in the area in which the water body is located.

(C) Upon receipt of a complete antidegradation demonstration, the commissioner shall provide public notice, request comment, and, if requested, schedule and hold a public meeting on the demonstration.

(c) In addition to the other provisions of this section, the commissioner shall consider the following in determining whether to allow an impact to a wetland:

(1) The designated and existing uses that a wetland provides.

(2) The anticipated impact of the proposed loss of wetland acreage that:

(A) permanently or seasonally contains a threatened or endangered species; or

(B) provides habitat for a threatened or endangered species;

as determined after consultation with the department of natural resources.

(3) Water quality impacts, including the cumulative impacts in a watershed, that may be a consequence of approving a request to impact a wetland.

(d) The commissioner shall ensure that no degradation of a wetland designated as

an outstanding state resource water (OSRW) or outstanding national resource water (ONRW) will occur. Degradation to these wetlands is prohibited unless the following conditions are met:

- (1) The impact will last less than twelve (12) months.
- (2) The person intending to cause the impact first receives water quality certification for the impact.
- (3) The applicant minimizes and justifies the short term, temporary impact to the satisfaction of the commissioner.
- (4) The applicant demonstrates to the commissioner that no practicable alternative exists to avoid the impact using the criteria set forth in 327 IAC 17-3-5.
- (5) The applicant remediates any impacts to the wetland if required in the water quality certification.

***40 CFR § 230.10(c), **42 U.S.C. § 9601, and ***42 U.S.C. § 6901 are incorporated by reference. Copies of these laws may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402 or from the Indiana Department of Environmental Management, Office of Water Management, Indiana Government Center-North, 100 North Senate Avenue, Room 1255, Indianapolis, Indiana 46206. (Water Pollution Control Board; 327 IAC 2-1.8-5)**

327 IAC 2-1.8-6 Minimum water quality criteria for wetlands

Authority: IC 13-14-8-1; IC 13-14-8-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 6. (a) In addition to the criteria set forth in subdivisions (b) and (c), the following criteria apply at all times and places to wetlands:

(1) For wetlands located within the Great Lakes Basin, water quality criteria set forth in:

- (A) 327 IAC 2-1.5-8(b);**
- (B) 327 IAC 2-1.5-8(c)(1);**
- (C) 327 IAC 2-1.5-8(c)(5); and**
- (D) 327 IAC 2-1.5-8(e).**

(2) For wetlands located outside of the Great Lakes Basin, water quality criteria set forth in:

- (A) 327 IAC 2-1-6(a);**
- (B) 327 IAC 2-1-6(b)(1);**
- (C) 327 IAC 2-1-6(b)(5);and**
- (D) 327 IAC 2-1-6(e).**

(b) Hydrological conditions necessary to support the biological, chemical and physical characteristics naturally present in wetlands shall be protected to prevent significant adverse impacts on:

- (1) Water temperature variations.**
- (2) The chemical, nutrient, and dissolved oxygen regime of a wetland.**
- (3) The movement of aquatic fauna.**

- (4) The pH range of a wetland.**
- (5) Water flows, levels, or elevations.**
- (6) Extent and duration of saturation and inundation.**

(c) Water quality necessary to support existing habitats and the populations of water dependent flora and fauna shall be protected to prevent significant adverse impacts on the following:

- (1) Food supplies for aquatic life and wildlife.**
- (2) Reproductive and nursery areas.**

(Water Pollution Control Board; 327 IAC 2-1.8-6)

327 IAC 2-1.8-7 Criteria to designate a wetland as an outstanding national resource water

Authority: IC 13-14-8-1; IC 13-14-8-2

Affected: IC 13-18-3; IC 13-18-4; IC 14-31-1-8; IC 14-31-1-11

Sec. 7. Wetlands that may be considered for designation as an outstanding national resource water include wetlands that are recognized as:

- (A) important because of protection through official action, such as:**
 - (1) federal or state law;**
 - (2) presidential or secretarial action;**
 - (3) international treaty; or**
 - (4) interstate compact;**
- (B) having exceptional recreational significance;**
- (C) having exceptional ecological significance;**
- (D) having other special environmental, recreational, or ecological attributes; or**
- (E) wetlands whose designation as outstanding national resource waters is reasonably necessary for the protection of other waters so designated.**

(Water Pollution Control Board; 327 IAC 2-1.8-7)

327 IAC 2-1.8-8 Procedures for designating a wetland as an outstanding national resource water

Authority: IC 13-14-8

Affected: IC 13-14-9; IC 13-18-3; IC 13-18-4

Sec. 8. (a) A wetland may be designated as an outstanding national resource water (ONRW) only by the general assembly after recommendations for designation are made to the general assembly by the board and the environmental quality service council.

(b) Before recommending the designation of an ONRW, the department shall provide for an adequate public notice and comment period regarding the designation. The commissioner shall present a summary of the comments and information received during the comment period and the department's recommendation concerning designation no later than ninety (90) days after the end of the comment period.

(Water Pollution Control Board; 327 IAC 2-1.8-8)

SECTION 2. 327 IAC 17 IS ADDED TO READ AS FOLLOWS:

ARTICLE 17. WATER QUALITY CERTIFICATION

Rule 1. Water Quality Certification - General Provisions

327 IAC 17-1-1 Purpose

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 1. This article establishes procedures and criteria for the review of applications for state water quality certification required by Section 401 of the federal Clean Water Act, 33 U.S.C. §1341. It is the purpose of this article, consistent with the Clean Water Act, to maintain the chemical, physical, and biological integrity of the waters of the state and achieve no overall net loss of the existing wetlands resource base with respect to wetlands acreage and existing and designated uses in the state. (*Water Pollution Control Board; 327 IAC 17-1-1*)

327 IAC 17-1-2 Applicability

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 2. (a) This article governs the issuance of water quality certifications by the department of environmental management under Section 401 of the Clean Water Act, 33 U.S.C. §1341. Section 401(a)(1) of the Clean Water Act requires that an applicant for a federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, that may result in any discharge into navigable waters of the United States, shall obtain, from the state where the discharge does or will originate, a water quality certification that the discharge will comply with applicable provisions of Sections 301, 302, 303, 306, and 307 of the Clean Water Act (33 U.S.C. §§1311, 1312, 1313, 1316, and 1317). Section 401(d) requires the water quality certification to set forth any requirements necessary to assure that the applicant will comply with the applicable provisions of the Clean Water Act and state law, including water quality standards.

(b) Federal permits or licenses to which this rule applies include the following:

(1) A permit from the U.S. Army Corps of Engineers issued pursuant to either of the following:

(A) Section 10 of the River and Harbors Act.

(B) Section 404 of the federal Clean Water Act.

(2) A license issued by the Federal Energy Regulatory Commission.

(*Water Pollution Control Board; 327 IAC 17-1-2*)

327 IAC 17-1-3 Requirement for a water quality certification

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 3. No person may conduct an activity that requires a federal permit or license and that may result in a discharge into waters of the United States unless the department of environmental management has issued a water quality certification or waiver under this article for the activity.

(Water Pollution Control Board; 327 IAC 17-1-3)

327 IAC 17-1-4 Definitions

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-2

Affected: IC 13-11-2-265

Sec. 4. In addition to the applicable definitions contained in IC 13-11-2, the following definitions apply throughout this rule:

(1) “Administrator” means the administrator of the United States Environmental Protection Agency or an authorized representative, including the regional administrator for Region V.

(2) “Applicable provisions of federal law and state law” means the provisions of Sections 301, 302, 303, 306, and 307 of the Clean Water Act (33 U.S.C. §§1311, 1312, 1313, 1316, and 1317) and other appropriate provisions of Indiana law, including state water quality standards.

(3) “Applicant” means an individual, corporation, or other entity that owns the site that is the subject of an application for a water quality certification.

(4) “Channel” means the flowpath of a waterway, including streams, ditches, rivers, and other related water courses.

(5) “Clean Water Act” means the Federal Water Pollution Control Act pursuant to 33 U.S.C. §1341.

(6) “Commissioner” means the commissioner of the department of environmental management.

(7) “Compensatory mitigation” means the restoration, creation, or rehabilitation of a wetland or other waters of the state to compensate for losses of designated and existing uses.

(8) “Corps general permit” means a permit that:

(A) authorizes a category of discharges of dredged or fill material under the Clean Water Act where the categories of discharge:

(i) are similar in nature;

(ii) will cause only minimal adverse environmental effects when performed separately;

(iii) will have only minimal cumulative adverse effect on the environment; and

(B) is issued by the Corps of Engineers pursuant to 33 U.S.C. 1344(e).

(9) “Corps individual permit” means a permit issued by the Corps of Engineers pursuant to 33 U.S.C. 1344(a).

(10) “Corps of Engineers” means the United States Department of the Army, Corps of Engineers.

- (11) **“Creation”** means the manipulation of a site for the purpose of turning the site, which was not previously a wetland, into a wetland.
- (12) **“Cumulative impacts”** means the effects on waters of the state that are attributable to the collective effect of multiple discharges.
- (13) **“Deep water”** means areas that are permanently inundated at mean annual water depths greater than six and six-tenths (6.6) feet. These are areas that are not wetlands and may include lakes, rivers, ponds, and borrow pits.
- (14) **“Emergent wetland”** means a wetland that is characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens.
- (15) **“Enhancement”** means the conversion of one wetland type to another with a higher perceived value; it is considered to be an impact to a wetland’s existing and designated uses.
- (16) **“Farmed wetland”** means a wetland that prior to December 23, 1985, was manipulated and used to produce an agricultural commodity, and on December 23, 1985, did not support woody vegetation and is inundated for fifteen (15) consecutive days or more during the growing season or ten percent (10%) of the growing season, whichever is less, in most years (fifty (50) percent chance or more).
- (17) **“Final decision”** means a decision by the commissioner to issue, deny, modify, revoke, or waive a Section 401 water quality certification.
- (18) **“Forested wetland”** means a wetland dominated by woody vegetation that has a diameter, at breast height, greater than three (3) inches, regardless of total height. Wetlands that have been cleared of woody vegetation within five (5) years previous to the project will be considered forested wetlands by the department.
- (19) **“Navigable waters”** means waters of the United States, including the territorial seas.
- (20) **“Open water”** means areas of a wetland that are permanently inundated at mean annual water depths less than or equal to six and six-tenths (6.6) feet. These areas may contain little or no vegetation.
- (21) **“Practicable”** means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.
- (22) **“Preservation”** means the maintenance and protection of a wetland as a wetland in perpetuity via a deed restriction or a conservation easement to insure that designated and existing uses are protected from anthropogenic activities.
- (23) **“Rehabilitation”** means the remediation of factors causing degradation of existing and designated uses of a wetland.
- (24) **“Relocation”** means the alteration of the flow line of a waterway, including new alignments, tiling, piping, or other related practices.
- (25) **“Restoration”** means the manipulation of a site for the purpose of returning the site, which was previously a wetland, back into a wetland.
- (26) **“Scrub-shrub wetland”** means a wetland dominated by woody vegetation having a height greater than three and two-tenths (3.2) feet and a stem diameter less than three (3) inches. This includes true shrubs, young trees, and trees or shrubs stunted by environmental conditions.
- (27) **“Secondary impacts”** means impacts on waters of the state that are associated

with a discharge but do not result from the actual discharge.

(28) “Shaping or other alteration” means the manipulation of streambanks to make the channel wider or narrower or an alteration of the slopes of streambanks.

(29) “Tier I wetland” means a wetland classified as such according to 327 IAC 2-1.8-4.

(30) “Tier II wetland” means a wetland classified as such according to 327 IAC 2-1.8-4.

(31) “Water dependent” means a project that requires access to, proximity to, or siting within a water body in order to fulfill the basic purpose of the project.

(32) “Water quality certification” means a Section 401 water quality certification issued by the Indiana department of environmental management.

(33) “Waters of the United States” means those waters as defined in 33 CFR § 328.*

(34) “Waters” or “waters of the state” has the meaning set forth in IC 13-11-2-265.

(35) “Watershed” means a geographic region within which water drains into a particular river, stream, or other body of water.

(36) “Wetland” means an area that is inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. For the purpose of this rule, wetlands will be determined and delineated using the U.S. Army Corps of Engineers Wetland Delineation Manual, Technical Report Y-87-1, January 1987**.

*33 CFR § 328 is incorporated by reference. Copies of this document may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402 or from the Indiana Department of Environmental Management, Office of Water Management, Indiana Government Center-North, 100 North Senate Avenue, Room 1255, Indianapolis, Indiana 46206. (Water Pollution Control Board; 327 IAC 2-1.8-2)

**The Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1 is incorporated by reference. Copies of this manual may be obtained from the U.S. Army Engineer Waterways Experiment Station, 3909 Halls Ferry Road, Vicksburg, Mississippi 39180 or from the Indiana Department of Environmental Management, Office of Water Management, Indiana Government Center-North, 100 North Senate Avenue, Room 1255, Indianapolis, Indiana 46206.

(Water Pollution Control Board; 327 IAC 17-1-4)

Rule 2. Application and Notice

327 IAC 17-2-1 Application requirements

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 1. (a) An application for a water quality certification must be submitted to and approved by the commissioner in advance of commencement of the project and must:

- (1) be on a form approved by the commissioner;**
- (2) be complete;**
- (3) be legible;**
- (4) contain the signed statement required by subsection (b);**
- (5) be signed by the applicant;**
- (6) include a wetland delineation performed in accordance with procedures established by the Corps of Engineers according to the Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1 (January 1987)*, depicting all wetlands on the subject property;**
- (7) provide a list of names and addresses of landowners adjacent to the proposed project; and**
- (8) provide the alternatives analysis required by 327 IAC 17-3-4(c) and 327 IAC 17-3-5(c).**

(b) An application required by subsection (a) must contain the following statement, signed by the applicant, "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

(c) If the applicant is a corporation or otherwise not an individual, the application must contain the name of the individual who shall be primarily responsible for the project that is to be certified.

(d) If the department determines that more information is necessary, including a compensatory mitigation plan, in order to accomplish the review of the application for a water quality certification, it shall promptly notify the applicant and request such information. The application is not considered complete until the applicant has submitted the requested information.

(e) The department shall act upon an application for a water quality certification within one (1) year of the receipt of a complete application. If the department fails to act within one (1) year, then the water quality certification shall be deemed waived unless the federal permitting agency, in its discretion, accepts the water quality certification after such time period has passed.

(f) The applicant has the burden of proving that its project will comply with the applicable provisions of the federal Clean Water Act and state law.

***The Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1 is incorporated by reference. Copies of this manual may be obtained from the U.S. Army Engineer Waterways Experiment Station, 3909 Halls Ferry Road, Vicksburg, Mississippi 39180 or from the Indiana Department of Environmental Management, Office of Water**

Management, Indiana Government Center-North, 100 North Senate Avenue, Room 1255, Indianapolis, Indiana 46206. (*Water Pollution Control Board; 327 IAC 17-2-1*)

327 IAC 17-2-2 Public notice of a water quality certification application

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 2. (a) Except as provided in subsection (g), the commissioner shall provide public notice of and an opportunity to comment on applications submitted to the department for water quality certification.

(b) The public notice must contain the following information:

- (1) The applicable statutory and regulatory authority.**
- (2) The name and address of the applicant and, if any, the applicant's agent.**
- (3) The name, address, and telephone number of the department's employee who may be contacted concerning the application.**
- (4) The location of the proposed project, including the fourteen (14) digit hydrologic code of the watershed in which the project is located.**
- (5) A brief description of the proposed project, including the following:**
 - (A) Its purpose and intended use.**
 - (B) A description of any structures that are to be erected.**
 - (C) The type, composition, and quantity of materials to be disposed of or discharged.**
 - (D) Possible impacts to wetlands, streams, or other waters of the state.**
 - (E) A description of any compensatory mitigation proposed by the applicant.**
- (6) A statement telling where the public may view or obtain a copy of the plan and elevation drawing, if reproducible, showing the general and specific site location.**
- (7) A statement that the comment period deadline is twenty-one (21) calendar days from the date of mailing of the public notice unless otherwise specified.**
- (8) A statement that any person may request in writing that a public hearing or meeting be held to consider the application.**

(c) The department shall provide notice of an application for a water quality certification to the following:

- (1) The applicant.**
- (2) Landowners adjacent to the proposed project, as provided by the applicant under section 1(a)(7) of this rule.**
- (3) The following agencies:**
 - (A) Department of natural resources.**
 - (B) United States Environmental Protection Agency.**
 - (C) United States Fish and Wildlife Service.**
 - (D) Any state or federal agency responsible for issuing water quality certification in any other state whose water quality may be adversely affected by a proposed project.**
 - (E) County plan commissions.**

(4) Any person who requests copies of public notices of water quality certification applications.

(d) The department shall consider comments received during the public comment period and may forward comments received, via certified mail, within five (5) working days after the close of the comment period, to the applicant for a response. The applicant shall provide the department with a written response to the comments, within fourteen (14) days of receipt of the comments, with the following exceptions:

(1) If an applicant requires additional time to respond to comments, the applicant shall inform the department in writing within the fourteen (14) day response time period.

(2) The department may place an application on hold for a time period agreed upon with the applicant requesting additional time.

If an applicant fails to provide a written response to comments received, the department may deny the application.

(e) The department shall issue a supplemental public notice of an application in the event of one (1) of the following:

(1) The department originally denied the application for water quality certification, but the applicant has submitted a new or modified proposal.

(2) The applicant is proposing to significantly change a project for which the department had previously provided public notice and the department received comments from the public on the project as originally proposed.

(3) A request for modification of a water quality certification is made according to 327 IAC 17-5.

(f) If the applicant is proposing to significantly change a project for which the department had previously provided public notice, but the department received no public comment on the project, the department may issue a supplemental public notice.

(g) A joint public notice shall be issued by the department and the Corps of Engineers, utilizing the public notice procedures set forth in 33 CFR § 325.3, if an application for a water quality certification requires a corps individual permit. (*Water Pollution Control Board; 327 IAC 17-2-2*)

327 IAC 17-2-3 Procedures for notification to adjacent states

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-2; IC 13-18-3-3

Affected: IC 13-18-3; IC 13-18-4

Sec. 3. (a) If the department determines that a proposed project may adversely affect the quality of the waters of another state, the department shall notify the following about the receipt of the application:

(1) The administrator.

(2) The certifying agency in any state whose water quality may be affected.

(b) In addition to rights granted to a state under Section 401(a)(2) of the Clean Water Act, a state whose water quality may be affected shall be granted sixty (60) days after receipt of notification, provided according to subsection (a)(2), to:

- (1) respond to the department;**
- (2) to provide comments; and**
- (3) to specify objections to the application.**

(Water Pollution Control Board; 327 IAC 17-2-3)

327 IAC 17-2-4 Public hearing or meeting

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 4. (a) A person may request in writing that a public hearing or meeting be held to consider issues related to water quality in connection with a specific application for water quality certification. The request must state the reason for requesting the public hearing or meeting as specifically as possible and must be submitted to the department during the public notice period.

(b) The department may hold a public hearing or public meeting if:

- (1) substantial questions about the project are raised during the comment period;**
- (2) new information is obtained about water quality issues; or**
- (3) significant interest is expressed in the project.**

(c) The department shall publish, in a daily or weekly newspaper in general circulation throughout the area affected by the discharge, a public notice of a scheduled public hearing or meeting setting forth the date, time, and place. The department shall notify landowners specified under subsection (a)(7) of the public hearing or meeting. The department shall locate the public hearing or meeting in the vicinity of the proposed project.

(d) The department shall encourage an applicant to attend a public hearing or meeting held concerning the applicant's proposed project.

(e) Any person may appear at a public hearing or meeting and present oral or written comments concerning the proposed project.

(f) The department shall consider comments received at the public hearing or meeting or submitted to the department within fourteen (14) days of the public meeting or hearing before a decision may be rendered on the application.

(g) A public hearing shall be recorded and a transcript prepared. A copy of the transcript must be available for purchase from the department or the transcriber of the public hearing and be available for public inspection during normal business hours at the department. A public meeting will not be recorded. *(Water Pollution Control Board; 327*

IAC 17-2-4)

Rule 3. Review of Water Quality Certification Applications

327 IAC 17-3-1 Assessment of wetland existing and designated uses

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 1. Uses set forth at 327 IAC 2-1.8-3 are presumed to exist in a wetland. (*Water Pollution Control Board; 327 IAC 17-3-1*)

327 IAC 17-3-2 Assessment of alternatives and impacts

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 2. (a) An applicant shall consider all alternatives that would avoid impacts to a wetland or other waters of the state, regardless of the size, location, or type of project.

(b) The department shall:

- (1)** review a water quality certification application to determine if the proposed project is water dependent; and
- (2)** evaluate the alternatives for avoidance for each project and may require an applicant to consider additional options for avoiding impacts to the waters of the state.

(*Water Pollution Control Board; 327 IAC 17-3-2*)

327 IAC 17-3-3 Water dependent projects impacting a Tier I wetland or other waters of the state

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 3. (a) The following requirements apply to a water dependent project that will involve impacts to a Tier I wetland or other waters of the state:

- (1)** The applicant shall demonstrate that all reasonable and appropriate steps have been taken to minimize potential adverse impacts on wetlands or other waters of the state.
- (2)** The department shall consider the following factors to determine if potential impacts to the wetlands or other waters have been minimized to the greatest extent:
 - (A)** Spatial requirements of the project.
 - (B)** Location of existing structural or natural features that may dictate the placement or configuration of the project.
 - (C)** The purpose of the project and how the purpose relates to placement, configuration, or density.
 - (D)** The spatial distribution of wetlands or other waters on the site.
 - (E)** Individual, secondary, and cumulative impacts.

(F) An applicant's efforts to:

- (i) modify the size, scope, configuration, or density of the project;**
- (ii) remove or accommodate site constraints, including:**
 - (AA) zoning;**
 - (BB) infrastructure;**
 - (CC) access; or**
 - (DD) natural features; and**
- (iii) otherwise minimize impacts.**

(b) If the department finds that an applicant has not complied with the requirements of subsection (a), the department shall deny certification for the proposed project.

(c) Any impact to a wetland or other waters remaining after the applicant has minimized impacts to the greatest extent possible shall be compensated for according to 327 IAC 17-4. (*Water Pollution Control Board; 327 IAC 17-3-3*)

327 IAC 17-3-4 Nonwater dependent projects impacting a Tier I wetland or other waters of the state

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 4. (a) The following requirements apply to a nonwater dependent project that will involve impacts to a Tier I wetland or other waters of the state:

- (1) Practicable alternatives are presumed to exist unless the applicant demonstrates otherwise.**
- (2) The department shall not grant certification if there is a practicable alternative to the proposed discharge that would avoid or have less impact on a wetland or other waters of the state.**

(b) An applicant shall analyze and consider all alternatives to the design of a proposed project that would avoid or have less adverse impacts to a wetland or other waters of the state. The alternatives analysis must include the following:

- (1) A no-impact alternative that would entirely avoid impacts to a wetland and other waters of the state.**
- (2) Alternative sites or locations in the region where the project could be conducted, including the location of the alternative site, the owner, and the cost of acquiring the property.**
- (3) Alternative project configurations or designs on the proposed project site.**
- (4) Specific information explaining why each alternative or alternative site or location was rejected.**

Compensatory mitigation shall not be considered an alternative in the analysis conducted according to this subsection.

(c) The applicant shall submit the alternatives analysis to the department as a part

of the application according to 327 IAC 17-2-1(a)(8).

(d) The department may require an applicant to analyze additional alternatives.

(e) The department shall consider the following factors to determine whether practical alternatives to avoid impacts are available:

- (1) The basic project purpose and whether it could be reasonably accomplished using one (1) or more other sites in the region that would avoid impacts to wetlands or other waters.
- (2) The existence of sites not owned by the applicant in the area that could reasonably be obtained, used, expanded, or managed to fulfill the basic purpose of the proposed project.
- (3) The general suitability of the alternate sites considered by the applicant.
- (4) The ability to reasonably modify the size, scope, configuration, or density of the project to avoid impacts to a wetland.
- (5) Efforts by the applicant, including requests for variances or planned unit developments, to accommodate or remove constraints imposed on alternatives by zoning standards or infrastructure.

(f) If the department determines there are no practicable alternatives that would avoid or have less adverse impacts on a Tier I wetland or other waters of the state, then the applicant shall demonstrate that all reasonable and appropriate steps have been taken in the project design to minimize potential impacts on wetlands or other waters of the state before a water quality certification shall be issued. The department shall consider the following factors to determine if all reasonable and appropriate steps have been taken:

- (1) Spatial requirements of the project.
- (2) Location of existing structural or natural features that may dictate the placement or configuration of the project.
- (3) The purpose of the project and how the purpose relates to placement, configuration, or density.
- (4) The spatial distribution of wetlands or other waters on the site.
- (5) Individual, secondary, and cumulative impacts.
- (6) An applicant's efforts to:
 - (A) modify the size, scope, configuration, or density of the project;
 - (B) remove or accommodate site constraints, including zoning, infrastructure, access, or natural features; and
 - (C) otherwise minimize impacts.

(g) If the department finds that an applicant has not complied with the requirements of subsection (f), the department shall deny certification for the proposed project.

(h) Any impact to a wetland or other waters remaining after the applicant has minimized impacts to the greatest extent possible must be compensated for according to 327 IAC 17-4. (*Water Pollution Control Board; 327 IAC 17-3-4*)

327 IAC 17-3-5 Impacts to Tier II wetlands

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 5. (a) The following requirements apply to a project that will involve impacts to a Tier II wetland:

(1) Practicable alternatives are presumed to exist unless the applicant demonstrates otherwise.

(2) The department shall not grant certification if there is a practicable alternative to the proposed discharge that would avoid or would have less impact on a wetland or other waters of the state.

(b) An applicant shall analyze and consider all alternatives to the design of a proposed project that would avoid impacts to a wetland or other waters of the state. The alternatives analysis must include the following:

(1) A no-impact alternative that would entirely avoid impacts to a wetland and other waters of the state.

(2) Alternative sites or locations in the region where the project could be conducted, including the location of the alternative site, the owner, and the cost of acquiring the property.

(3) Alternative project configurations or designs on the proposed project site.

(4) Specific information explaining why each alternative or alternative site or location was rejected.

Compensatory mitigation shall not be considered an alternative in the analysis conducted according to this subsection.

(c) The applicant shall submit the alternatives analysis to the department as a part of the application according to 327 IAC 17-2-1(a)(8).

(d) The department may require an applicant to analyze additional alternatives.

(e) The department shall consider the following factors to determine whether practical alternatives to avoid impacts are available:

(1) The basic project purpose and whether it could be reasonably accomplished using one (1) or more other sites in the region that would avoid wetland impacts.

(2) The existence of sites not owned by the applicant in the area that could reasonably be obtained, used, expanded, or managed to fulfill the basic purpose of the proposed project.

(3) The general suitability of the alternate sites considered by the applicant.

(4) The ability to reasonably modify the size, scope, configuration, or density of the project to avoid impacts to a wetland.

(5) Efforts by the applicant, including requests for variances or planned unit developments, to accommodate or remove constraints imposed on alternatives by zoning standards or infrastructure.

(f) If the department determines there are no practicable alternatives that would avoid or have less adverse impacts on a Tier II wetland or other waters of the state, then the applicant shall demonstrate that all reasonable and appropriate steps have been taken in the project design to minimize potential impacts on a wetland or other waters of the state before a water quality certification shall be issued. The department shall consider the following factors to determine if all reasonable and appropriate steps have been taken:

- (1) Spatial requirements of the project.**
- (2) Location of existing structural or natural features that may dictate the placement or configuration of the project.**
- (3) The purpose of the project and how the purpose relates to placement, configuration, or density.**
- (4) The spatial distribution of wetlands or other waters on the site.**
- (5) Individual, secondary, and cumulative impacts.**
- (6) An applicant's efforts to:**
 - (A) modify the size, scope, configuration, or density of the project;**
 - (B) remove or accommodate site constraints including zoning, infrastructure, access, or natural features; and**
 - (C) otherwise minimize impacts.**

(g) If the department finds that an applicant has not complied with the requirements of subsection (f), the department shall deny certification for the proposed project.

(h) If the applicant has demonstrated that there is no practicable alternative and there will still be impacts to a Tier II wetland, then the applicant shall prepare and submit to the department an antidegradation demonstration in accordance with 327 IAC 2-1.8-5. The applicant shall submit the demonstration within forty-five (45) days of receipt of notification from the department that the project will impact a Tier II wetland. Except as provided in subsection (i), the antidegradation demonstration must include the following:

- (1) An evaluation of the baseline economic condition of the county where the project is proposed to be located, including the county's:**
 - (A) unemployment rate;**
 - (B) population;**
 - (C) average household income relative to state and national averages; and**
 - (D) the percentage of the population living below the poverty level.**
- (2) Information on the anticipated impacts attributable to the proposed project in the county where the project will be located, including:**
 - (A) the change in employment or avoidance of a reduction in employment;**
 - (B) the reduction in the local unemployment rate attributable to the proposed project;**
 - (C) the total, annual, new payroll of resident nonofficers for the new or increased employment and the average wages for the new nonofficer employees or, in lieu of this information, the applicant may provide other information that quantifies the extent of the economic benefit to be provided to the area;**

- (D) the change in net tax revenues;
 - (E) the change in production level, if applicable;
 - (F) the change in efficiency, if applicable; and
 - (G) the extent of correction of an environmental or public health problem.
- (3) An identification of the potential environmental and public health impacts attributable to the proposed project, including the potential impact on the following:
- (A) The aquatic community.
 - (B) Endangered or threatened species.
 - (C) Characteristics of the wetland that are unique or rare within the locality or state.
 - (D) Ground water recharge.
 - (E) Drinking water supplies.
 - (F) Recreation and aesthetics.
 - (G) Scientific research.
 - (H) Shoreline or stream bank erosion protection.
 - (I) Natural or regional storm water detention or retention.

(i) An applicant may provide:

- (1) an explanation as to why information required by subsection (h) is not necessary or appropriate for inclusion in the antidegradation demonstration; and
- (2) additional information that the applicant deems relevant to the demonstration.

(j) If the department determines an antidegradation demonstration is incomplete, the department shall notify the applicant and specify additional information that is necessary to make the demonstration complete. The applicant shall supply the information to the department within forty-five (45) days of the request. The department shall deny the application if the applicant fails to provide the additional information in the time required, unless the department grants additional time to respond for good cause.

(k) Upon receipt of a complete antidegradation demonstration, the department shall provide public notice, request comment, and, if requested, schedule and hold a public meeting on the demonstration.

(l) After the receipt of a complete antidegradation demonstration, the department shall specify in writing any additional relevant information that it deems necessary to make a determination on the demonstration. Failure of an applicant to submit any additional information requested by the department within forty-five (45) days of receipt of the department's request shall result in the denial of the application unless the department grants additional time to respond for good cause.

(m) The department shall approve an antidegradation demonstration only if it determines that the proposed project would support important social and economic development in the area and would not result in an unacceptable environmental impact.
(*Water Pollution Control Board; 327 IAC 17-3-5*)

327 IAC 17-3-6 Impacts to wetlands designated as outstanding state resource waters and outstanding national resource waters

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 6. The department shall ensure that no degradation of a wetland designated as an outstanding state resource water (OSRW) or an outstanding national resource water (ONRW) will occur. Degradation to these waters is prohibited unless the following conditions are met:

- (1)** The impact will last less than twelve (12) months.
- (2)** The person intending to cause the impact first receives water quality certification for the impact.
- (3)** The applicant minimizes and justifies the short term, temporary impact to the satisfaction of the commissioner.
- (4)** The applicant demonstrates to the commissioner that no practicable alternative exists to avoid the impact using the criteria set forth in section 5 of this rule.
- (5)** The applicant remediates any impacts if required by the water quality certification.

(Water Pollution Control Board; 327 IAC 17-3-6)

327 IAC 17-3-7 Review of corps general permits

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 7. (a) If the department determines a proposed corps general permit may cause or contribute to significant impact to waters of the state, the department may:

- (1)** propose modifications or revisions to the corps general permit to prevent significant impact to waters of the state;
- (2)** condition a water quality certification issued for the corps general permit to prevent significant impact to waters of the state; or
- (3)** deny water quality certification for the proposed corps general permit.

(b) The department shall deny water quality certification for any corps proposed general permit that would authorize activities in the following waters:

- (1)** A Tier II wetland.
- (2)** An outstanding state resource water.
- (3)** An outstanding national resource water.
- (4)** Exceptional use waters
- (5)** Designated salmonid waters.

IDEM may issue a water quality certification for a proposed corps general permit provided the water quality certification contains conditions prohibiting the use of the corps general permit in the waters specified in subdivisions (1) through (5).

(c) The department shall provide public notice according to 327 IAC 17-2-2 when considering an application for water quality certification for a corps general permit.

Rule 4. Compensatory Mitigation of Water Quality Impacts

327 IAC 17-4-1 Compensatory mitigation required for projects impacting a Tier I wetland

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-7; IC 13-23-13; IC 13-24-1; IC 13-25-5

Sec. 1. (a) Except for farmed wetlands, an applicant shall replace adversely affected existing or designated uses of a wetland proposed to be impacted through compensatory mitigation, if required, with a wetland of the same type and supporting the same designated and existing uses as approved by the department according to the conditions of the water quality certification issued to the applicant.

(b) The department shall require the applicant to provide compensatory mitigation for a project that has an impact affecting more than one-tenth (0.1) acre of wetland.

(c) An applicant shall provide compensatory mitigation for a project that will impact one-tenth (0.1) acre or less of a Tier I wetland and will have a significant impact on water quality as determined by the department. The department shall consider the following factors to determine if there is a significant impact:

(1) Whether the project's purpose is to maintain, repair, or rehabilitate existing, manmade structures, excluding drainage ditches.

(2) The secondary and cumulative impacts of the project.

(3) The proximity and hydrologic connection of the wetland proposed to be impacted to other water bodies.

(4) The duration of the activity associated with the project.

(5) The plant species diversity and fish and wildlife habitat components of the wetland to be impacted.

(6) Whether the project is being undertaken to control, abate, or correct an environmental problem or threat to the environment, including a response action pursuant to one (1) of the following:

(A) The Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. 9601)*.

(B) A corrective action pursuant to the Resource Conservation Recovery Act (42 U.S.C. 6901)**.

(C) An underground storage tank corrective action under IC 13-23-13.

(D) A remediation of petroleum releases under IC 13-24-1.

(E) A voluntary remediation under IC 13-25-5.

(F) An abatement or correction of any polluted condition under IC 13-18-7.

***42 U.S.C. § 9601 and **42 U.S.C. § 6901 are incorporated by reference. Copies of these laws may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402 or from the Indiana Department of Environmental Management, Office of Water Management, Indiana Government Center-North, 100 North**

Senate Avenue, Room 1255, Indianapolis, Indiana 46206. (*Water Pollution Control Board; 327 IAC 17-4-1*)

327 IAC 17-4-2 Compensatory mitigation required for projects impacting a Tier II wetland

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 2. Before an impact shall be allowed to occur to a Tier II wetland, an applicant must do the following to the satisfaction of the department:

(1) Fully complete compensatory mitigation that is demonstrated to be successful in having replaced the existing and designated uses and type of wetland that are intended to be impacted by the project.

(2) Provide written notice to the department of the successful completion of the compensatory mitigation required according to subdivision (1).

(*Water Pollution Control Board; 327 IAC 17-4-2*)

327 IAC 17-4-3 Compensatory mitigation required for an impact to other waters of the state

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-7; IC 13-23-13; IC 13-24-1; IC 13-25-5

Sec. 3. (a) If compensatory mitigation is required by the department for an impact to a water of the state that is not a wetland, then the compensatory mitigation must:

(1) be approved by the department; and

(2) replace the existing and designated uses of the adversely affected water in accordance with the conditions contained in the water quality certification issued to the applicant.

(b) The department shall require an applicant to provide compensatory mitigation for a project that the department determines will have a significant impact on water quality according to subsection (c) or involves one (1) or more of the following:

(1) Relocation of any stream, river, or ditch channel.

(2) Shaping or other alteration of more than three hundred (300) linear feet of a bank of a stream, river, or ditch.

(3) Conversion of a stream, river, or ditch channel into a closed pipe, hardened ditch, or other such water conveyance structure.

(4) Filling or conversion of more than one-tenth (0.10) acre of a deep water area.

(c) The department shall consider the following factors to determine if a project will have a significant impact on water quality:

(1) The project's requirement to maintain, repair, or rehabilitate existing, manmade structures, excluding drainage ditches.

(2) The secondary and cumulative impacts of the project.

(3) The proximity and hydrologic connection of the water body proposed to be

impacted to other water bodies.

(4) The duration of the activity associated with the project.

(5) The plant species diversity and fish and wildlife habitat components of the water to be impacted.

(6) Whether the project is being undertaken to control, abate, or correct an environmental problem or threat to the environment, including a response action pursuant to one (1) of the following:

(A) The Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. 9601)*.

(B) A corrective action pursuant to the Resource Conservation Recovery Act (42 U.S.C. 6901)**.

(C) An underground storage tank corrective action under IC 13-23-13.

(D) A remediation of petroleum releases under IC 13-24-1.

(E) A voluntary remediation under IC 13-25-5.

(F) An abatement or correction of any polluted condition under IC 13-18-7.

(d) A project involving the relocation, realignment, or channelization of an existing stream is presumed to have a significant impact on water quality unless an applicant demonstrates otherwise.

*42 U.S.C. 9601 and **42 U.S.C. 6901 are incorporated by reference. Copies of these laws may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402 or from the Indiana Department of Environmental Management, Office of Water Management, Indiana Government Center-North, 100 North Senate Avenue, Room 1255, Indianapolis, Indiana 46206. (*Water Pollution Control Board; 327 IAC 17-4-3*)

327 IAC 17-4-4 Time for performing compensatory mitigation

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 4. Where compensatory mitigation is required as a condition of a water quality certification, the applicant must complete the required compensatory mitigation within one (1) year of the date of issuance of the water quality certification unless a written extension is granted by the department. (*Water Pollution Control Board; 327 IAC 17-4-4*)

327 IAC 17-4-5 Location of compensatory mitigation

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 5. (a) Compensatory mitigation of impacts to waters of the state must occur, if practicable, on the same site as the project and its associated impacts as determined by the department.

(b) The department may authorize off-site compensatory mitigation if it determines

that on-site compensatory mitigation has a low probability of success. In all cases the compensatory mitigation site must be located as close as possible to the project and its associated impacts. One (1) of the following shall be met before off-site compensatory mitigation may be authorized:

- (1) Off-site compensatory mitigation using a mitigation bank must occur in the mitigation bank's service area as stipulated in the mitigation bank's charter.
- (2) Off-site compensatory mitigation not using a mitigation bank shall, to the greatest extent possible, be located within the same fourteen (14) digit United States Geological Survey Hydrologic Unit Code (USGS HUC) as the impact site.

(c) If off-site compensatory mitigation under subsection (b)(2) is not practicable, off-site compensatory mitigation must be located according to the following:

- (1) Compensatory mitigation for an impact to a Tier I wetland shall be provided in accordance with the following:
 - (A) If the impact is less than or equal to twenty-five hundredths (0.25) acre, compensatory mitigation shall be provided within the same USGS HUC eight (8) digit watershed as the project impact.
 - (B) If the impact is greater than twenty-five hundredths (0.25) acre:
 - (i) compensatory mitigation shall be provided within the same USGS HUC eleven (11) digit watershed as the project impact; or
 - (ii) if a better compensatory mitigation option can be identified within the eight (8) digit watershed, then approval may be granted at the discretion of the department upon written request from the applicant.
- (2) Compensatory mitigation for an impact to a Tier II wetland shall be provided, regardless of size, within the same USGS HUC fourteen (14) digit watershed as the project impact.

(d) The department shall deny certification for a proposed project if a compensatory mitigation site cannot be located in compliance with this section. (*Water Pollution Control Board; 327 IAC 17-4-5*)

327 IAC 17-4-6 Protection of a compensatory mitigation site

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4; IC 32-1-2; IC 32-5-2.6

Sec. 6. (a) A compensatory mitigation site must be protected in perpetuity through one (1) of the following methods:

- (1) A conservation easement held by a third party committed to conservation and maintenance of the property as a wetland and the wetland's existing and designated uses.
- (2) A deed restriction that legally binds the property owner to maintain the property as a wetland and the wetland's existing and designated uses.

(b) A properly recorded conservation easement or deed restriction required by subsection (a) must be submitted to the department within one hundred eighty (180) days

of the date of issuance of the water quality certification.

(c) The department may grant additional time to the applicant to comply with the terms of this section upon receipt of a written request for extension that provides valid reasons for the needed extension. In no event shall an extension be granted for any period longer than one (1) year from the date of issuance of water quality certification.

(d) After the department notifies an applicant that the applicant's compensatory mitigation site is successful, the recipient may transfer responsibility for the perpetual maintenance of the compensatory mitigation site in accordance with the following:

(1) The recipient of the water quality certification shall notify the department no less than sixty (60) days in advance of the proposed transfer date.

(2) The recipient of the water quality certification shall submit to the department a written agreement between the recipient and the transferee. The agreement must contain:

(A) a specific date for transfer of responsibility;

(B) an acknowledgment that the water quality certification recipient is liable for violations or mitigation failures up to the date of transfer; and

(C) an acknowledgment that the transferee is responsible for maintaining the compensatory mitigation site as a wetland, the wetland's existing and designated uses in perpetuity and is liable for violations or mitigation failures from the date of transfer and into the future.

(D) a copy of the properly recorded conservation easement or deed restriction.

If the transfer is approved by the department, the department shall modify the water quality certification to reflect the transfer. (*Water Pollution Control Board; 327 IAC 17-4-6*)

327 IAC 17-4-7 Compensatory mitigation ratios

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 7. (a) Wetlands proposed to be impacted shall be compensated for according to Table 7(a):

Table 7(a) Compensatory Mitigation Ratios	
Type of Wetland Proposed to be Impacted	Compensatory Mitigation : Impacted Wetland Ratio
Open Water/Emergent	2:1
Scrub/Shrub	3:1
Forested	4:1

Tier II Wetlands	1:1
Farmed Wetlands	1:1

(b) A compensatory mitigation ratio required by Table 7(a) may be reduced by the department in accordance with the following:

(1) An applicant proposing to replace a wetland that the department determines is significantly degraded or adversely altered may have the compensatory mitigation ratio lowered by up to five-tenths (0.5), at the discretion of the department, where the applicant proposes to replace the wetland of the same type supporting more uses and greater diversity of vegetation. This subdivision does not apply to farmed wetlands and Tier II wetlands.

(2) If an applicant completes mitigation prior to initiation of an impact and the compensatory mitigation is demonstrated to the department to be successful in replicating the existing and designated uses and type of the wetland proposed to be impacted, then a ratio may be lowered to 1:1 for the affected wetland type. The applicant must coordinate with the department prior to initiating the compensatory mitigation in order to insure that the applicable provisions of 327 IAC 17-4 will be met. The department shall not issue a water quality certification for a proposed impact until the department has determined the up-front compensatory mitigation is successful.

(3) An applicant that proposes wetland preservation, wetland rehabilitation, or a combination of both may have the compensatory mitigation ratio lowered, at the discretion of the department, by up to one (1.0) for a wetland type for a Tier I wetland, if the following terms are met:

(A) A net loss of wetland acreage shall be prevented by providing wetland restoration, creation, or both that is equal to the acreage of impact.

(B) The area to be preserved or rehabilitated meets the qualifications for classification as a Tier II wetland, an Outstanding State Resource Water or an Outstanding National Resource Water.

(C) The secondary and cumulative impacts resulting from the project are insignificant.

In no event shall a mitigation ratio be reduced below 1:1.

(c) For wetlands that have been impacted without prior authorization from the department, the department shall:

(1) require partial or full restoration of the impacted wetlands;

(2) increase the compensatory mitigation ratios in 7(a);

(3) deny water quality certification for the after-the-fact application; or

(4) require any combination of the above.

(Water Pollution Control Board; 327 IAC 17-4-7)

327 IAC 17-4-8 Financial responsibility concerning compensatory mitigation

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 8. (a) The success of compensatory mitigation for a Tier I wetland or other waters must be guaranteed by an applicant according to one (1) of the following means:

- (1) Successful completion of the compensatory mitigation, with written confirmation of the successful completion received from the department, prior to the department's authorization of any impact to the wetland.**
- (2) Posting of a performance bond or an irrevocable letter of credit, prior to the issuance of the water quality certification, that covers the following:**

(A) Costs of:

- (i) constructing and monitoring; and**
- (ii) other costs associated with the successful completion of the compensatory mitigation wetland.**

(B) Outstanding liens on the property.

- (3) Purchase of credits in a mitigation bank approved by the department, if authorized pursuant to 327 IAC 17-4-10, and the applicant supplies proof to the department that credits have been purchased.**

(b) The department shall release an applicant from the financial assurance required by subsection (a)(2) when:

- (1) the compensatory mitigation has achieved all success criteria required by section 15 of this rule for at least two (2) consecutive years; and**
- (2) the department has inspected the compensatory mitigation site, determined it to be successful, and provided the applicant with written confirmation of the success status.**

(Water Pollution Control Board; 327 IAC 17-4-8)

327 IAC 17-4-9 Storm water control requirements

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 9. If an impact to a Tier I or Tier II wetland is authorized by the department, the following storm water control requirements shall be met by the applicant:

- (1) Appropriate storm water control measures must be installed to ensure that the peak post-development rate of surface water run-off, based on a ten (10) year, twenty-four (24) hour storm, as defined according to 327 IAC 15-7-2(1), from the impacted wetland does not exceed the peak pre-development rate of run-off, based on a ten (10) year, twenty-four (24) hour storm, as defined according to 327 IAC 15-7-2(1), from the impacted wetland.**
- (2) Water quality improvement measures must be incorporated into the design of the storm water control measures to the maximum extent practicable and may include, but are not limited to:**

(A) Oil and grease skimmers.

(B) Vegetative buffer strips.

(Water Pollution Control Board; 327 IAC 17-4-9)

327 IAC 17-4-10 Compensatory wetland mitigation bank usage

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 10. The department shall allow utilization of a mitigation bank if the following provisions are met:

- (1)** The provisions of 327 IAC 17-4-5 have been followed.
- (2)** The mitigation bank has been approved by the department.
- (3)** The department approves the use of the mitigation bank for the applicant's required compensatory mitigation.
- (4)** The department determines that the compensatory mitigation produced at the bank will compensate for the existing and designated uses lost at the proposed wetland impact site.
- (5)** An impact being mitigated through the use of a mitigation bank must occur in the mitigation bank's service area as stipulated in the mitigation bank's charter.

(Water Pollution Control Board; 327 IAC 17-4-10)

327 IAC 17-4-11 Documentation required for wetland compensatory mitigation plan

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 11. (a) A wetland compensatory mitigation plan must be:

- (1)** submitted by the applicant if wetland compensatory mitigation is required by the department; and
- (2)** approved by the department prior to the issuance of a water quality certification.

(b) A wetland compensatory mitigation plan shall, at a minimum, give details of the following:

- (1)** Existing conditions at the wetland to be impacted, including the following:
 - (A)** Hydrology.
 - (B)** Type of vegetation, including native, exotic, and invasive species.
 - (C)** Current land use of the project site.
 - (D)** Surrounding land use.
 - (E)** Soils.
 - (F)** Topography.
- (2)** Existing conditions at the proposed wetland mitigation site, including the following:
 - (A)** Hydrology.
 - (B)** Type of vegetation, including native, exotic, and invasive species.
 - (C)** Current land use of the project site.
 - (D)** Surrounding land use.
 - (E)** Soils.
 - (F)** Topography.
- (3)** Acreage and type of wetlands proposed to be impacted.
- (4)** Acreage and type of proposed wetland compensatory mitigation.

- (5) Description of compensatory mitigation goals and success criteria.**
- (6) Description of compensatory mitigation methods.**
- (7) Planting lists.**
- (8) Narrative description of the following:**
 - (A) Planned hydrology, including the following:**
 - (i) Methods and data used to estimate the planned hydrology.**
 - (ii) Planned seasonal high water elevation and depth.**
 - (iii) Planned mean water elevation and depth.**
 - (iv) Planned duration of saturation or inundation, or both.**
 - (B) Planned vegetation communities developed by using “Classification of Wetlands and Deepwater Habitats of the United States”, U.S. Fish and Wildlife Service, Office of Biological Services, FWS/OBS-79/31, (December 1979)*, to list the wetland community types to be constructed.**
- (9) Drawings, plans, photographs, and maps depicting the planned postconstruction grades, water levels, and plant communities of the compensatory mitigation, including the following:**
 - (A) Detailed topographic drawings.**
 - (B) Cross sectional drawings, depicted in National Geodetic Vertical Datum, including the following:**
 - (i) Planned grade elevation.**
 - (ii) Water control elevation.**
 - (iii) Planned mean water elevation.**
 - (iv) Planned seasonal high water elevation.**
 - (C) Planting plan related directly to water depths.**
 - (D) Aerial photographs of the proposed impact site prior to construction.**
 - (E) Aerial photographs of the proposed compensatory mitigation site prior to construction.**
 - (F) Map depicting the location of the proposed mitigation site relative to new construction or other existing landmarks.**
 - (G) Longitude and latitude of the center of each proposed compensatory mitigation site.**

(c) The applicant shall submit a baseline report summarizing the following:

- (1) Conditions existing at the site prior to construction of the proposed project and compensatory mitigation.**
- (2) The construction process.**
- (3) Design features to be implemented to restore the aquatic habitat.**

(d) The department may request additional information from the applicant if it is determined to be necessary.

***This document is incorporated by reference. Notwithstanding language to the contrary in the primarily incorporated documents, the versions of all secondarily incorporated documents, which are those documents referred to in the primarily incorporated documents, shall be the versions in effect on the date of final adoption of this**

rule. Copies of this publication may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402 or from the Indiana Department of Environmental Management, Office of Water Management, Indiana Government Center-North, 100 North Senate Avenue, Room 1255, Indianapolis, Indiana 46206. (*Water Pollution Control Board; 327 IAC 17-4-11*)

327 IAC 17-4-12 Review of wetland mitigation plans

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 12. A complete compensatory mitigation plan shall be reviewed by the department and approved only if the department determines the following:

(1) The existing and designated uses lost by impacting an existing wetland will be replaced by compensatory mitigation providing uses equal or superior to the lost uses.

(2) There is an overall probability of success of the compensatory mitigation, taking into consideration the following factors:

(A) The methods to be used to restore or create wetlands on a proposed compensatory mitigation site.

(B) The side slopes or other slopes affecting water levels on a proposed compensatory mitigation site.

(C) The proximity of a proposed compensatory mitigation site to other waters or natural areas.

(D) The presence of exotic plant species on or adjacent to a proposed compensatory mitigation site.

(E) The inclusion of a upland buffer zone around a proposed compensatory mitigation site.

(F) The methods proposed to control hydrology on a proposed compensatory mitigation site.

(G) The land use adjacent to a proposed compensatory mitigation site.

(H) The methods proposed to establish vegetation on a proposed compensatory mitigation site.

(I) The proposed plan for long term management of a proposed compensatory mitigation site.

(J) The uses to be replaced.

(K) The success criteria to be met, as specified in section 15 of this rule.

(*Water Pollution Control Board; 327 IAC 17-4-12*)

327 IAC 17-4-13 Compensatory wetland mitigation monitoring

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-14-1-13; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 13. (a) A wetland compensatory mitigation monitoring plan must be approved by the department prior to the commencement of compensatory mitigation activities.

(b) Except as provided in subsection (e), a compensatory mitigation site shall be monitored until the department provides the applicant with a letter confirming that the success criteria stipulated in the water quality certification and in section 15 of this rule have been achieved for at least two (2) consecutive years.

(c) Vegetation monitoring must occur:

- (1) between June 1 and November 1 unless the applicant provides compelling scientific evidence that the wetland type proposed requires earlier monitoring; and**
- (2) annually within thirty (30) days of the anniversary date of the first monitoring event.**

(d) The monitoring period shall start over if monitoring occurs other than as required by subsection (c).

(e) An applicant shall be responsible for the monitoring necessary to determine when a compensatory mitigation site has achieved the success criteria. A monitoring plan must, at a minimum, provide the following:

- (1) Description of the compensatory mitigation success criteria.**
- (2) Goals that must be met to achieve the criteria.**
- (3) Methods for evaluating the success of compensatory mitigation.**
- (4) Map of sample points.**
- (5) Monitoring schedule.**
- (6) Specific factors to be monitored, that may include the following:**
 - (A) Vegetation sampling.**
 - (B) Exotic species surveys.**
 - (C) Growth rates for trees and shrubs.**
 - (D) Planted species survival rates.**
 - (E) Macroinvertebrate sampling.**
 - (F) Amphibian sampling.**
 - (G) Wildlife surveys.**
 - (H) Ground water and hydrology monitoring.**
 - (I) Soils sampling.**
 - (J) Water quality sampling.**
 - (K) Delineation of the jurisdictional extent of wetlands on the site.**
 - (L) As built survey of boundaries, elevations of structures, and topography.**

(f) If monitoring reports or inspection of the compensatory mitigation site reveals the presence of exotic plant species in excess of the limits listed in section 15 of this rule, the department shall extend the monitoring period required by subsection (b) to monitor the effectiveness of control measures and gauge the rate of infestation.

(g) The department may release an applicant from an extended monitoring period required by subsection (f) if one (1) of the following occurs:

- (1) The site complies with section 15 of this rule.**
- (2) Sufficient funding is provided in a long term management trust to control the**

exotic plant species.

(Water Pollution Control Board; 327 IAC 17-4-13)

327 IAC 17-4-14 Documentation required for a wetland monitoring report

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-14-1-13; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 14. An applicant shall submit wetland monitoring reports to the department as required by the water quality certification. A monitoring report must, at a minimum, provide the following:

- (1) Water quality certification identification number.**
- (2) Corps of Engineer identification number.**
- (3) Project description.**
- (4) Reprint of the monitoring plan.**
- (5) Results of monitoring.**
- (6) Report on the progress of the compensatory mitigation.**
- (7) Photographic documentation.**
- (8) Graphics depicting the development of plant communities and water levels that illustrate the progress of the compensatory mitigation over the monitoring period relative to the success criteria.**
- (9) A postconstruction report that establishes baseline conditions at the compensatory mitigation site, including a summary of changes in hydrology and details of:**
 - (A) final contours;**
 - (B) wetland plantings; and**
 - (C) seedings.**

(Water Pollution Control Board; 327 IAC 17-4-14)

327 IAC 17-4-15 Success criteria for a wetland compensatory mitigation site

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 15. A wetland compensatory mitigation site must meet the following minimum success criteria:

- (1) Wetland areas of a compensatory mitigation site must meet the wetland jurisdictional requirements of the Corps of Engineers.**
- (2) The wetland plant communities are free of the following exotic species:**
 - (A) Purple loosestrife (*Lythrum salicaria*).**
 - (B) Common reed (*Phragmites australis*).**
 - (C) Eurasian water milfoil (*Myriophyllum spicatum*).**
- (3) The combined surface area coverage of reed canary grass (*Phalaris arundinacea*) and cattail (*Typha spp.*), shall not cover more than fifteen percent (15%) of a community type, unless the applicant provides documentation in the mitigation plan that the natural wetlands the compensatory mitigation site is attempting to recreate have a larger cattail (*Typha spp.*) component or the impacted wetlands contained**

larger areas of cattail (*Typha spp.*).

(4) No more than ten percent (10%) surface area coverage of the compensatory mitigation site may be:

(A) open water;

(B) bare ground; or

(C) a combination of clauses (A) and (B);

unless the applicant provides documentation in the mitigation plan that the natural wetlands the compensatory mitigation site is attempting to recreate have a larger open water or bare ground component or the impacted wetlands contained larger areas of open water or bare ground.

(5) Native vegetation, excluding reed canary grass (*Phalaris arundinacea*) and cattail (*Typha spp.*), covers at least seventy percent (70%) of the compensatory mitigation site.

(6) The existing and designated uses lost at the impacted wetland are replaced.

(7) The success criteria set forth in the approved compensatory mitigation plan must be met.

(Water Pollution Control Board; 327 IAC 17-4-15)

327 IAC 17-4-16 Compensatory mitigation remediation for wetlands

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 16. (a) An applicant shall submit a compensatory mitigation remediation plan for wetlands to the department for approval within sixty (60) days of one (1) of the following:

(1) Inability of the compensatory mitigation site to achieve:

(A) the planned hydrology within two (2) growing seasons after completion of construction of the compensatory mitigation;

(B) the success criteria at least once within five (5) years of the completion of construction of the compensatory mitigation; or

(C) the success criteria for two (2) consecutive years within the first seven (7) years of monitoring.

(2) Indication, from at least two (2) consecutive years of monitoring, that the compensatory mitigation site is not progressing toward achieving the success criteria required by section 15 of this rule.

(b) A remediation plan must include the following:

(1) Identification of the problem or problems preventing the compensatory mitigation site from achieving the success criteria.

(2) A course of action to eliminate the problem or problems that may include one (1) or more of the following:

(A) Selection of an alternative compensatory mitigation site that is more suitable for the compensatory mitigation required.

(B) Replanting the compensatory mitigation site.

(C) Regrading the compensatory mitigation site.

- (D) Construction of an upland buffer around the site.**
- (E) Herbicide treatment of exotic invasive vegetation and native, nuisance species.**

(c) The applicant shall initiate implementation of the remediation plan within one (1) calendar year of its approval by the department. (*Water Pollution Control Board; 327 IAC 17-4-16*)

327 IAC 17-4-17 Documentation required for a compensatory mitigation plan for waters other than wetlands

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 17. (a) A compensatory mitigation plan for waters other than wetlands must be:
(1) submitted by the applicant if required by the department; and
(2) approved by the department prior to the issuance of a water quality certification.

(b) A compensatory mitigation plan for waters other than wetlands must provide the following, where applicable:

(1) An assessment of the stream fisheries, water chemistry, flow regime, and riparian communities proposed to be impacted within the project area.

(2) An assessment of the in-stream habitat requirements of fish species that are noted in the stream assessment required under subdivision (1). The assessment shall include an analysis, by species, of the aspects of stream structure that support the following:

- (A) Foraging.**
- (B) Breeding.**
- (C) Nursery.**
- (D) Refuge areas.**

(3) Details for the replacement or rehabilitation of instream habitat types, which may include:

(A) Specifications for:

- (i) pools;**
- (ii) riffles;**
- (iii) in-channel or stream bank habitat structures;**
- (iv) riparian zone plantings and/or revegetation;**
- (v) creation of channel meanders;**
- (vi) restoration or rehabilitation of adjacent wetlands; and**
- (vii) restoration or rehabilitation of deep water habitats.**

(B) Construction plans with depictions of the locations of the mitigative measures specified under clause (A).

(C) An explanation of the construction plans required by clause (B), including:

- (i) the predicted success of the compensatory mitigation; and**
- (ii) detailed contingency plans if the mitigation proposed under item**

- (i) fails.
- (D) A construction time schedule specifying the sequence of the construction of the following:
 - (i) The project.
 - (ii) The compensatory mitigation.
- (4) The location of sampling points. The UTM coordinates of the sampling points shall be denoted on plan overview sheets and on aerial photos.
- (5) A description of the compensatory mitigation success criteria described in section 22 of this rule.
- (c) An applicant shall submit a baseline report summarizing the following:
 - (1) Conditions existing at the site prior to construction of the proposed project and compensatory mitigation.
 - (2) The construction process.
- (d) The department may request additional information from the applicant if the department determines it is necessary. (*Water Pollution Control Board; 327 IAC 17-4-17*)

327 IAC 17-4-18 Review of mitigation plans for waters other than wetlands

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 18. The department shall review a complete compensatory mitigation plan for waters other than wetlands and shall approve it only if the following conditions are met:

- (1) The existing and designated uses lost by impacting waters other than wetlands will be adequately replaced by the compensatory mitigation.
- (2) There is an overall probability of success taking into consideration the following factors:
 - (A) The methods to be used to recreate waters other than wetlands at a proposed compensatory mitigation site.
 - (B) The construction methods to be used to recreate or stabilize stream banks.
 - (C) The proximity of a proposed compensatory mitigation site to other waters or natural areas.
 - (D) The presence of exotic plant species on a proposed compensatory mitigation site.
 - (E) The inclusion of a buffer zone around a proposed compensatory mitigation site.
 - (F) The methods proposed to control water flow through a proposed compensatory mitigation site.
 - (G) The land use adjacent to a proposed compensatory mitigation site.
 - (H) The methods proposed to establish vegetation on a proposed compensatory mitigation site.
 - (I) The proposed plan for long term management of a proposed compensatory mitigation site.

(J) The uses to be replaced.

(K) The success criteria to be met.

(Water Pollution Control Board; 327 IAC 17-4-18)

327 IAC 17-4-19 Documentation required for a compensatory mitigation monitoring plan for waters other than wetlands

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-14-1-13; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 19. (a) A compensatory mitigation monitoring plan for waters other than wetlands must be approved by the department prior to the issuance of a water quality certification.

(b) A monitoring plan must, at a minimum, provide the following:

(1) Description of the compensatory mitigation success criteria.

(2) Goals that must be achieved to meet the success criteria.

(3) Methods for evaluating the success of compensatory mitigation.

(4) Map of sampling points.

(5) Monitoring schedule.

(6) Description of tests and sampling methods required to monitor the development and overall success of the mitigation.

(Water Pollution Control Board; 327 IAC 17-4-19)

327 IAC 17-4-20 Documentation required for a monitoring report for waters other than wetlands

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-14-1-13; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 20. (a) An applicant must submit monitoring reports for waters other than wetlands to the department as required by conditions specified in the water quality certification. A monitoring report must, at a minimum, provide the following:

(1) A survey of the grade, shape, and capacity of mitigation to verify that these criteria match the criteria in the mitigation plan approved by the department.

(2) Results obtained using approved sampling protocols beginning at the time the mitigation construction is completed and water is released into the mitigation site, including the results of any required annual fisheries sampling that shall be conducted:

(A) in July of the year after the release of water into relocated channels; and

(B) from points established through discussions between the applicant and the department.

(b) Reports submitted to the department must include the following:

(1) Summary and raw data sheets.

(2) A narrative overview of the results of the surveys.

(3) A comparison of the results to the success criteria in section 22 of this rule.

(c) The department will evaluate results of testing and monitoring annually to compare the project to the success criteria and determine if additional action or monitoring is warranted.

(d) The department may require the applicant to prepare an annual report of habitat structures and features placed within the water body to assess:

- (1) their condition or structural failure within the channels;
- (2) the accumulation of sediment or debris; and
- (3) other maintenance issues.

(Water Pollution Control Board; 327 IAC 17-4-20)

327 IAC 17-4-21 Compensatory mitigation monitoring for waters other than wetlands

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-14-1-13; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 21. (a) A compensatory mitigation monitoring plan for waters other than wetlands must be approved by the department prior to the issuance of a water quality certification.

(b) A compensatory mitigation site shall be monitored until the department provides the applicant with a letter confirming that the success criteria stipulated in the water quality certification and in section 22 of this rule have been achieved for at least two (2) consecutive years.

(c) The applicant shall be responsible for monitoring factors necessary to determine when a compensatory mitigation site has achieved the success criteria required. These factors may include the following:

- (1) Vegetation sampling.
- (2) Fish surveys.
- (3) Macroinvertebrate surveys.
- (4) Water quality sampling.
- (5) Postconstruction surveys of boundaries of the project site and site elevations.
- (6) An evaluation of whether habitat and in-stream structures are functioning as designed.
- (7) An assessment of the stability of stream banks and channel bottoms.

(Water Pollution Control Board; 327 IAC 17-4-21)

327 IAC 17-4-22 Success criteria for a compensatory mitigation site for waters other than wetlands

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 22. The department shall require a compensatory mitigation site for waters other than wetlands to meet the following minimum success criteria:

- (1) A reconstructed or relocated channel must:

- (A) support a community of fish species equal to or greater in diversity than the original channel; and
- (B) be comparable to the grade, hydraulic capacity, and basic channel geometry of the channel as specified in the water quality certification.
- (2) A stream bank must:
 - (A) be stable; and
 - (B) require no additional structural improvements or corrections to maintain stream structure or bank stability.
- (3) The existing and designated uses lost from an impacted water body must be replaced.
- (4) The success criteria set forth in the approved compensatory mitigation plan must be met.

(Water Pollution Control Board; 327 IAC 17-4-22)

327 IAC 17-4-23 Compensatory mitigation remediation for waters other than wetlands

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Affected: IC

Sec. 23. (a) An applicant shall submit a compensatory mitigation remediation plan for waters other than wetlands to the department for approval within sixty (60) days of one (1) of the following:

- (1) Evidence of the following at the compensatory mitigation site:
 - (A) A structural failure.
 - (B) Damage from storm events.
 - (C) A downward trend in fishery communities that is the result of a failed habitat structure within the compensatory mitigation channel.
 - (D) Die off among plants or other vegetation features.
 - (2) Indication from at least two (2) consecutive years of monitoring that the site is trending away from achievement of the success criteria required by section 22 of this rule.
- (b) A remediation plan must include the following:**
- (1) Identification of the problem or problems preventing the compensatory mitigation site from achieving the success criteria.
 - (2) A course of action to eliminate the problem or problems that may include one (1) or more of the following:
 - (A) Addition of structures designed to enhance habitat or stabilize stream banks.
 - (B) Replanting the compensatory mitigation site.
 - (C) Reconstruction of the mitigation site.

(c) The applicant shall initiate implementation of the remediation plan within one (1) calendar year of its approval by the department. *(Water Pollution Control Board; 327 IAC 17-4-23)*

Rule 5. Issuance, Denial, Revocation, Modification, or Expiration of a Water Quality Certification

327 IAC 17-5-1 Departmental action regarding a water quality certification

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 1. (a) The department shall issue one (1) of the following decisions concerning an application for a water quality certification:

(1) The department may grant a water quality certification for a proposed impact to a Tier I wetland or waters other than wetlands if:

- (A) no other practicable alternative exists;**
- (B) the project complies with all applicable federal and state laws;**
- (C) impacts have been minimized in accordance with 327 IAC 17-3-4 (f); and**
- (D) the applicant provides compensatory mitigation in accordance with 327 IAC 17-4.**

(2) The department may grant a water quality certification for a proposed impact to a Tier II wetland if:

- (A) no other practicable alternative exists;**
- (B) the project complies with all applicable federal and state laws;**
- (C) the department approves the applicant's antidegradation demonstration; and**
- (D) the applicant provides compensatory mitigation that is completed and determined by the department to be successful in replacing all adversely impacted wetland existing and designated uses.**

(3) The department may grant certification for a project involving an impact to an outstanding state resource water or outstanding national resource water if:

- (A) no other practicable alternative exists;**
- (B) the project complies with all applicable federal and state laws;**
- (C) impacts have been minimized in accordance with 327 IAC 17-3-6; and**
- (D) the impact is short term and temporary, generally less than one (1) year in duration.**

(4) The department shall deny certification if it is determined that:

- (A) the requirements of subdivision (1), (2), or (3) are not met;**
- (B) significant degradation of water quality, including secondary and cumulative impacts, may result from the project;**
- (C) the proposed compensatory mitigation will not successfully replace the impacted existing and designated uses of the wetland;**
- (D) the project will cause significant degradation to water quality that cannot be offset with compensatory mitigation, even if alternatives are not available; or**
- (E) the applicant has failed to submit a complete application or has failed to provide additional information requested by the department.**

(5) The department shall waive a water quality certification if the department fails to make a final determination within one (1) year of its receipt of a complete

application unless the federal permitting agency chooses to accept a certification subsequent to the expiration of one (1) year.

(b) If the department grants a water quality certification, then the department shall include in the certification conditions and monitoring requirements the department deems necessary to ensure that the applicant complies with the applicable provisions of federal and state laws. (*Water Pollution Control Board; 327 IAC 17-5-1*)

327 IAC 17-5-2 Revocation or modification of a water quality certification

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-14-1-13; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 2. (a) The department may revoke a water quality certification if one (1) of the following occurs:

- (1) The applicant does not comply with one (1) or more conditions of the water quality certification.
- (2) The applicant has caused or is likely to cause a violation of a state water quality standard or other applicable statutory or regulatory requirement.
- (3) The applicant is in violation of one (1) of the following:
 - (A) Construction of compensatory mitigation measures according to the water quality certification.
 - (B) Construction of the project according to plans or specifications reviewed by the department.
- (4) The applicant has misrepresented or failed to disclose fully all relevant facts in the application or during the application process.
- (5) The applicant has failed to submit a monitoring report, post-construction report, or other document as required by 327 IAC 17-4.

(b) The department may modify a water quality certification if the department:

- (1) receives a request from the applicant holding a valid water quality certification, to modify a project or its associated impacts; or
- (2) determines that modification is necessary to ensure compliance with applicable provisions of federal or state law that have changed since issuance of the certification, including changes in:

- (A) construction or operation of the project;
- (B) characteristics of the receiving water;
- (C) the applicable water quality criteria; or
- (D) applicable effluent limitations or other requirements of state law.

(c) The department shall process an application for modification as if it were an original application. (*Water Pollution Control Board; 327 IAC 17-5-2*)

327 IAC 17-5-3 Expiration of a water quality certification

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 3. (a) A water quality certification granted or waived by the department shall expire two (2) years after its issuance date if work is not commenced within wetlands or other waters. The department may extend the expiration date if:

- (1) requested by the applicant prior to the original expiration date; and**
- (2) the department determines there has not been a change in the circumstances related to the water body or project as originally proposed.**

(b) A water quality certification granted by the department for a corps general permit shall:

- (1) be effective for the duration of the corps general permit; and**
- (2) be modified or revoked if the department determines the corps general permit is causing or contributing to significant impacts to water quality.**

(Water Pollution Control Board; 327 IAC 17-5-3)

327 IAC 17-5-4 Emergency issuance of a water quality certification

Authority: IC 4-21.5-4-1; IC 4-21.5-4-2; IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 4. The commissioner:

(1) may issue an emergency water quality certification if:

- (A) an unacceptable and immediate threat to human life, water quality, or waters of the state, including wetlands, may occur; or**
- (B) a severe loss of property may result;**

before a water quality certification could be issued in accordance with normal procedures according to this article;

(2) shall issue a public notice, no later than ten (10) days after the issuance of an emergency water quality certification, which:

- (A) states the reasons for the emergency issuance; and**
- (B) complies with the requirements of 327 IAC 17-2-2; and**

(3) shall incorporate, into an emergency water quality certification, all standards and criteria that would normally be applied to a project not being reviewed under the emergency provision of this section.

(Water Pollution Control Board; 327 IAC 17-5-4)

Rule 6. Notice and Appeal of Final Decision

327 IAC 17-6-1 Notice of final decision

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 4-21.5

Sec. 1. (a) The department shall serve notice of its final decision by certified mail on the applicant and the following persons:

- (1) Those who submitted comments during the comment period.**
- (2) Those who requested notice of the final decision.**

(b) A final decision regarding a water quality certification issued by the department may be appealed in accordance with IC 4-21.5. A notice of final decision must include reference to the procedures available to appeal a final decision by requesting an adjudicatory hearing.

(c) A final decision becomes effective fifteen (15) days after service of the mailing is made, unless a petition for review and a petition for stay are filed according to IC 4-21.5-3-5 with the office of environmental adjudication within that fifteen (15) day period. (*Water Pollution Control Board; 327 IAC 17-6-1*)

Rule 7. Conditions Applicable to a Water Quality Certification

27 IAC 17-7-1 Responsibilities

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-18-3; IC 13-18-4

Sec. 1. (a) An applicant must comply with the conditions of the water quality certification issued in response to the application.

(b) Issuance of a water quality certification does not:

- (1) relieve the applicant of its duty to comply with federal and state laws or obtain other permits or authorizations required to conduct the project;**
- (2) authorize injury to persons or private property or invasion of other private rights;**
- (3) authorize impacts or activities not detailed in the application; or**
- (4) convey property rights or exclusive privileges.**

(Water Pollution Control Board; 327 IAC 17-7-1)

327 IAC 17-7-2 Right of entry

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-14-2-2; IC 13-18-3-1; IC 13-18-3-2; IC 13-18-3-9

Affected: IC 13-18-3; IC 13-18-4

Sec. 2. (a) The department or its authorized representative, upon presentation of proper credentials, shall have the following rights:

- (1) A right of entry to, upon, or through any premises, public or private:**
 - (A) that are the subject of the application, including property that is the site of the proposed compensatory mitigation;**
 - (B) where records, reports, monitoring or treatment equipment or methods, samples, or other data, required to be provided or maintained, are located; and**
 - (C) that contain a possible violation.**
- (2) Access to and right to copy any record that is required to be kept or submitted under the terms of the certification.**
- (3) Access to inspect monitoring, treatment, or operational equipment or facility.**

(4) Access to take samples.

(b) The department may authorize an employee of the department or other person under contract with the department to act as its representative. (*Water Pollution Control Board; 327 IAC 17-7-2*)

327 IAC 17-7-3 Compliance and abatement orders

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-18-3-1; IC 13-18-3-2; IC 13-18-3-9, IC 13-18-4-6

Affected: IC 13-30

Sec. 3. (a) The department may conduct an inspection to determine compliance with a water quality certification or applicable provisions of federal and state laws.

(b) If the department determines that a person is violating or is about to violate a provision of 327 IAC 2 or a condition of a water quality certification, the department shall serve notice on the person, by certified mail, of the department's determination. The notice shall include an order against the person to immediately cease the violation and complete one (1) of the following actions:

(1) Rectify the violation by restoring the water body to its pre-violation condition.

(2) Submit an application to the department for a water quality certification for the unauthorized activity.

(*Water Pollution Control Board; 327 IAC 17-7-3*)

327 IAC 17-7-4 Enforcement

Authority: IC 13-13-5-1; IC 13-13-5-2; IC 13-14-1-12; IC 13-18-3-1; IC 13-18-3-2

Affected: IC 13-30

Sec. 4. A violation of this article may subject a person causing or contributing to the violation to administrative or judicial enforcement proceedings and the penalties provided pursuant to IC 13-30. (*Water Pollution Control Board; 327 IAC 17-7-4*)